VI.—MEMOIRS ON THE COLEOPTERA OF THE HAWAIIAN ISLANDS.

By The REV. T. BLACKBURN, B. A., and Dr. D. SHARP. (Plates IV. and V.)

[Read, March 17th, 1884.]

INTRODUCTORY.

Seven years ago very little was known of the entomology of the Sandwich, or as they are now, perhaps more correctly, called the Hawaiian, Islands. About that time Mr. Blackburn commenced a residence in the archipelago, at Honolulu, and has since devoted as much time as the duties of his official position permitted to the subject of its entomological fauna. As the result of his activity, numerous Papers have been published in several scientific journals; and as Mr. Blackburn has now ceased to reside in the islands, we have thought it well to make what, so far as Mr. Blackburn's researches are concerned, may be called a final *resumé* of our present knowledge of the Coleoptera.

This object, it has appeared to us, might most satisfactorily be accomplished by Three Memoirs :—

I. Descriptions of such genera and species as are hitherto undescribed.*

II. A Systematic Catalogue, with a brief statement as to the habits, habitat, &c., of each species.

III. Topographical Table, accompanied by some generalizations, summaries, and comments on the Coleopterous fauna of the archipelago.

I.

ON SOME NEW SPECIES AND GENERA OF COLEOPTERA.

In this Memoir, some of the descriptions have been made by Mr. Blackburn, and some by myself; they are arranged in sequence, our individual responsibilities being indicated by appending to each description the initials of the describer, viz. T. B. for the Rev. Thomas Blackburn, and D. S. for David Sharp. The nomenclature and classification indicated is very little, because all that is necessary is given in the immediately following Systematic Catalogue of Hawaiian Coleoptera.

D. S.

* A short account of the Islands and of Mr. Blackburn's collecting there is appended.

Fam. DYTISCIDÆ.

COPELATUS.

Copelatus mauiensis, n. sp.—Elongatus, subparallelus, subtilissime reticulatus, niger, capite prothorace antennis palpis, pedibusque rufescentibus; prothorace transverso, linea obscure punctata trans partem anteriorem et secus latera tracta et ad basin reflexa; elytris punctorum seriebus obscure notatis. Long. $5\frac{1}{2}$ m.m.

Allied to C. parvulus, Boisd., but easily distinguished by its elongate, parallel, less convex form, and darker colour; by the more clearly-impressed line (containing some obscure punctures) surrounding the front and sides of the thorax a little within the margin; and the rather strong punctuation which forms a kind of reflexed continuation, within the basal angles, of the impressed line.

A single specimen occurred in a "water-hole" at an elevation of about 4500 feet above the sea, on Haleakala, Maui.

T. B.

Fam. STAPHYLINIDÆ.

BOLITOCHARA.

Bolitochara impacta, n. sp.—Testacea; antennis incrassatis, nigro-brunneis, basi testaceo; prothorace quadrato; elytris brunneis trans basin testaceis; abdomine ante apicem infuscato. Long. $2\frac{1}{3}$ m.m.

Probably allied to B. insulana, Fairm, from which it appears to differ in being considerably smaller, with the antennæ and elytra differently coloured.

As far as I have been able to examine this minute species, it possesses the tarsal characters of Bolitochara. The thorax resembles that of Haploglossa, but the head is constricted at the point of insertion in the thorax, though not as much as in the European species of Bolitochara. The shape of the thorax gives the insect a facies very different from that of Aleochara. The antennæ are scarcely so long as the head and thorax together, and are very strongly incrassate, resembling those of Aleochara mycetophaga, but are even still more thickened. The dissection of a specimen of B. impacta might probably lead to the establishment of a new genus to include its Tahitian ally with it; but as the species is unique in my collection, I am unwilling to dissect it, and it must stand for the present as a Bolitochara.

A single specimen occurred in marine rejectamenta on the beach near Honolulu. Repeated search in the same and similar localities failed to furnish a second specimen.

T. B.

Diestota.

Diestota montana, n. sp.—Subdepressa, nigra, nitida, antennis palpis pedibusque rufescentibus; capite prothoraceque fortiter nec dense, elytris sparsim fortissime, punctatis; abdomine fere impunctato. Long. 3 m.m.

The coarse and sparing punctuation of the anterior parts and the shining impunctate hind body of this insect separate it widely from all its allies.

The middle coxæ are widely separated, and the mesosternum appears to be carinated, although, from the way in which my specimen is set, it is very difficult to be sure on the latter point.

Waimea, Hawaii, by beating flowers at an elevation of about 3000 feet.

T. B.

Diestota incognita, n. sp.—Subdepressa, subnitida, nigricans, palpis pedibusque rufescentibus; capite fortiter densius prothorace minus distincte, elytris confuse crebrius, abdomine distincte, punctatis. Long. $2\frac{1}{2}$ m.m.

This species resembles D. carinata, but its different punctuation, &c., readily distinguish it.

The middle coxæ are widely separated, and the mesosternum is without any traces of a carina.

A single specimen was taken by beating flowers in a mountain forest on Hawaii, at an elevation of about 4000 feet.

T. B.

Myllæna.

Myllæna pacifica, n. sp.—Nigra, creberrime subtiliter punctata, subnitida, antennis pedibusque fuscis, illis articulo ultimo flavo; elytris prothorace haud longioribus; antennis capite prothoraceque conjunctis longioribus. Long. $3\frac{1}{4}$ m.m.

This insect resembles M. familiaris, Sh. The decidedly closer punctuation, however, the slightly longer antennæ with the apical joint of a clear yellow colour, and the distinctly though slightly shorter elytra, render it incapable of confusion with its ally. From M. vicina and M. curtipes the unicolorous hind body distinguishes it.

I may observe here that several of my specimens of M. familiaris, Sh., are not less than $3\frac{1}{4}$ m.m. in length, and that (unless the size he gives is a misprint) I must, by some accident, have sent unusually small specimens to Dr. Sharp, as I have only one example as small as that from which his description seems to have been made.

A single specimen was taken on a flower of Freycinetia on Mauna Loa, Hawaii, at an elevation of nearly 4000 feet above the sea.

T. B.

Myllæna oahuensis, n. sp.—Nigro-fusca, creberrime subtilissime punctata, subopaca; pedibus fuscis; antennis gracilibus capite prothorace elytrisque conjunctis vix brevioribus; abdominis segmento ultimo fusco. Long. $2\frac{3}{4}$ m.m.

The excessively fine and close punctuation of this insect, its long, almost unicolorous antennæ (which are considerably more slender than those of M. vicina), its elytra fully as long as the thorax and the fuscous apical segment of the hind body, are characters that in combination readily separate it from the other known Hawaiian species of the genus.

I may observe that I have two specimens of Myllæna from Maui, both very closely allied to M. vicina, Sh., but in my opinion distinct from it, and from each other. One of these is not in sufficiently good condition to be treated as a type of a new species; it appears to be larger than M. vicina, with the antennæ shorter and thicker, and the elytræ slightly longer. The other is so extremely close to M. vicina. Sh., that I hesitate to give it a name without having examined a number of specimens, though I have no doubt such examination would establish its distinctness; it is a smaller, narrower insect than M. vicina, with more slender antennæ. Both were obtained by beating flowers, one in the Wailuku Valley, the other at an elevation of some 5000 feet on Haleakala.

Several specimens have occurred on Oahu, but the record of the circumstances of capture has unfortunately been lost; probably, however, they were beaten from flowers in mountain forests near Honolulu.

T. B.

Oligota.

Oligota kauaiensis, n. sp.—Parum elongata; subnitida; rufopicea; antennis, palpis, pedibus, abdominisque segmento apicali, testaceis; elytris parce punctatis. Long. $1\frac{1}{2}$ m.m.

Antennæ pale-yellow, first and second joints elongate; third, fourth, and fifth scarcely differing *inter se*, all of them rather stout; sixth and seventh about as long as broad; eighth and ninth pretty strongly transverse; tenth large, as long as the two preceding together. Hind body slightly narrowed at base; tarsi short and stout.

Allied to O. polita, Sh., and O. glabra, Sh., but easily distinguishable from both by the much closer punctuation of the elytra. Its less elongate form, shorter tarsi, and more sparingly punctured elytra in combination separate it from O. mutanda, Sh., and from the species following in this paper.

I have a single specimen, differing as follows from the three allies—O. glabra, Sh.; polita, Sh.; and kauaiensis, mihi. It is about the same size as O. glabra, and is coloured as O. polita, save that the head and thorax are red. The punctuation agrees pretty closely with that of O. polita, of which species I

have no doubt it is a var. It was taken from a flower of Freycinetia, at an elevation of about 2500 feet, on Oahu.

A single specimen was taken by beating flowers on Waialeale, the highest mountain of Kauai, at an elevation of 2500 feet.

T. B.

Oligota longipennis, n. sp.—Sat elongata; nitida; rufopicea; antennarum basi pedibusque rufis; elytris elongatis rugatis; antennis brevibus incrassatis. Long. $1\frac{3}{4}$ m.m.

Antennæ short; joints one and two rather elongate; three and four about as long as broad; five to nine transverse, increasing in size; tenth considerably longer than ninth.

The elongate elytra (a third longer than the thorax), wrinkled and devoid of distinct punctuation, readily separate this insect from O. mutanda, Sh., to which it is allied; the elongate tarsi separate it from O. polita, Sh., &c.

My specimen of O. mutanda, Sh., is fully 2 m.m. in length. The antennæ (reported as wanting in Dr. Sharp's specimen) are as follows: — joints one and two, elongate; three to seven, shorter, but all longer than broad, and increasing in size; eight and nine, about as broad as long; ten, scarcely broader than nine, but nearly twice as long. The basal two joints are testaceous, the rest pitchy. I have a single specimen of a small Oligota (long. $1\frac{3}{4}$ m.m.), somewhat darker in colour than O. mutanda, Sh., and with the antennæ apparently a little more incrassated than in that species, but otherwise seeming to me identical with it. It was obtained by beating dead branches of trees, at an elevation of about 2500 feet, on the mountains of Lanai.

A single specimen was taken on Oahu, but exact particulars of capture are lost.

T. B.

Oligota simulans, n. sp.—Sub-ovata; distincte crebrius punctata; opaca; pubescens; nigro-fusca; antennis palpisque testaceis, pedibus abdominisque apice fuscis; antennis elongatis; elytris prothorace multo longioribus. Long. $2\frac{1}{8}$ m.m.

Antennæ pale yellow; joints one and two very elongate; three elongate; four and five about as long as broad, six to nine increasing in size, but not transverse; ten longer than eight and nine together.

The ovate form (much narrowed in front and behind); the even, well-defined, and rather close punctuation, extending over the whole upper surface of the insect; together with its long, incrassated antennæ, long tarsi, and conspicuous pubescence, give this species a very distinctive appearance. In some respects it approximates to Liophæna, but certainly cannot be placed in that genus.

A single specimen was taken on Waialeale, Kauai, by beating dead branches of trees.

T. B.

Oligota variegata, n. sp.—Linearis; parum nitida testacea; capite prothoraceque rufis, abdominis segmentis 1–4 et antennarum apice infuscatis; elytris prothorace parum longioribus, obscure subtiliter punctatis. Long. 1½ m.m.

Antennæ short; joints one and two elongate; three to five about as long as broad, and nearly equal *inter se;* six to nine pretty strongly transverse, and increasing in size; ten twice as long as, but scarcely wider than, nine.

This minute species is allied, I think, to the European O. pusillima, Gr., but is even more linear than that insect. Its build, size, colour, and very fine punctuation of elytra (which under a microscope appear to be minutely wrinkled rather than punctate), combine to separate it from all other species of the genus that I can ascertain to have been described.

A single specimen occurred under the bark of a living tree, at an elevation of about 3000 feet, on Konahuanui, Oahu.

T. B.

Oligota prolixa, n. sp.—Elongata, parce punctata, nigra, antennis palpis, pedibusque fusco-testaceis, palpis elongatis; elytris prothoracis longitudine; abdomine parallelo, elongato. Long. 2 m.m.

Antennæ rather short, almost without club, a little thickened externally; second joint elongate; third, small; fourth, fifth, and sixth, each small; seventh, eighth, and ninth, each about as long as broad; tenth, rather large, a good deal longer than the ninth. Palpi very elongate, about half as long as the antennæ. Head narrow and elongate. Prothorax transverse, rather convex, sparingly punctate. Elytra about as long as, and rather narrower than, the thorax, rather coarsely and sparingly punctate. Hind body with the first four segments of one width, thence narrowed to the extremity, the two basal segments not closely punctate, but less sparingly than those following; the pubescence scanty, but rather elongate.

This insect, I should think, will form a distinct genus; but as I have before me only one individual, in a rather dirty state, I cannot investigate it thoroughly. Mr. Blackburn sent it as No. 245, and states that the species was beaten from dead branches of trees on Haleakala, in Maui, and Mauna Loa, in Hawaii, at elevations of about 4000 feet,

D. S.

Lithocharis.

Lithocharis incompta, n. sp.—Depressa, ferruginea, abdomine fusco, antennis pedibusque testaceis, elytris in medio transversim obscuratis; crebrius punctata, subopaca. Long. 3¼ m.m.

Antennæ rather short, the terminal joints evidently a little thicker than the others; ninth and tenth joints each rather shorter than broad. Head large, slightly broader than the thorax or elytra, densely punctate, vertex a little emarginate in the middle, the neck rather slender. Thorax rather broader than long, a

good deal narrowed behind, the front margin a good deal produced in the middle, densely punctate, excessively finely carinate along the middle, and with a rather large obscure depression in front of the base on each side of the middle. Elytra longer than the thorax, and of a paler and brighter red colour, but with a dark cloud across the middle, closely punctate. Hind body rather slender, blackish; the hind portion of the sixth segment yellowish.

Three specimens, found on the flowers of Freycinetia, at an elevation of about 1500 feet, near Hilo, Hawaii. The one described is a female; it is closely allied to the Amazonian L. compressa, Sh., and is probably a native of some part of the American continent.

D. S.

Oxytelus.

Oxytelus bledioides, n. sp.—Rufescens; antennis piceis basi testaceis, pedibus testaceis; capite parce punctato, clypeo opaco subtilissime punctato; mandibulis sat brevibus; prothorace elytrisque sat fortiter nec crebre punctatis; illo transverso, postice angustato, trisulcato; his prothorace parum longioribus, in longum rugatis; tibiis anterioribus intermediisque biseriatim spinulosis. Long. 4 m.m.

Antennæ moderately long; joint one long and slender, nearly equalling the following three in length; joints two and three elongate, pedunculated; three longer than two; four transverse, but not wider than three; five transverse, much larger than four; six to nine transverse, a little larger than five, about equal *inter se;* ten not narrower than nine, but as long as broad; eleven nearly twice as long as ten.

A careful examination of this distinct-looking insect has failed to reveal any other distinction from typical Oxytelus than the presence of the well-defined double fringe of spines on the anterior four tibiæ, and a slightly peculiar build of antenna. As I have in my own collection several Oxyteli, showing an indication of duality in the row of spines on some of the tibiæ, I see no sufficient reason for calling the species described above by a new generic name.

The antennæ (owing to the basal four joints being testaceous and very much narrower than the other joints, while the apical seven are of a pitchy colour and of nearly uniform width) present the appearance of being composed of a short slender stem and a long cylindrical club.

A single specimen occurred under the bark of a tree near Honolulu.

T. B.

Lispinodes.

Lispinodes (?) quadratus, n. sp.—Subdepressus; linearis; nitidus; rufopiceus; antennis palpis mandibulis pedibusque rufescentibus; antennis crassis, capite thoraceque conjunctis longioribus; capite glabro, bi-impresso, antice marginato; prothorace subquadrato, postice distincte punctato, basi utrinque impresso; elytris

prothorace sat longioribus, obscure nec crebre punctatis, stria suturali fortiter impressa, basi utrinque fossa profunde impressa; femoribus crassis, tibiis anterioribus curvatis. Long. $3\frac{1}{2}$ m.m.

The antennæ are longer and thicker than those of L. explicandus, Sh., with joints seven to ten not so abruptly wider than the preceding joints. The slighter contraction of the thorax behind and the comparative shortness of the elytra also distinguish this insect.

This species does not present exactly the generic characters attributed by Dr. Sharp to Lispinodes, but, as it is undoubtedly allied to L. explicandus, I place it provisionally in its company. By the following characters it differs:—head moderate, margined in front, and with ill-defined antennal tubercles; parts of the mouth fairly well developed; maxillary palpi shortish and stout, with the apical joint acuminate, and about equal in length to the two preceding together; mandibles well developed and prominent; anterior coxæ almost contiguous, but a rather conspicuous process of the prosternum enters between them.

I unfortunately do not possess a type of Lispinus for comparison, but the well-defined separation of the anterior coxæ in it appears to bar it against this insect.

A single specimen occurred under the bark of a tree on the mountains near Honolulu.

T. B.

Lispinodes(?) pallescens, n. sp.—Glaber; subdepressus; linearis; nitidus; testaceus; antennis robustis, brevibus, prothorace vix longioribus, apice fortiter incrassato; capite magno, prothorace vix minore, antice utrinque impresso, postice nonnihil constricto; oculis parvis haud prominulis; prothorace obsolete canaliculato, postice angustato, utrinque foveolato; elytris prothorace parum longioribus, stria suturali et utrinque fossa basali profunde impressis; femoribus crassis. Long. $2\frac{1}{2}$ m.m.

This species does not fit naturally into any genus known to me. It will be convenient to call it Lispinodes provisionally—noting, however, that it differs from that genus, as characterized by Dr. Sharp, as follows—*i. e.*, it is much less depressed, with the head almost quadrate, and deeply sunk in the thorax, the eyes very small and flat, the mandibles resembling those of Prognatha ♀, and the coxæ as in L. (?) quadratus, mihi.

The pale unicolorous tint and short antennæ of this insect prevent any possibility of confusing it with any of its Hawaiian allies.

A single specimen was taken under the bark of a tree near Honolulu.

T. B.

Fam. CORYLOPHIDÆ.

Corylophus.

Corylophus rotundus, n. sp.—Latus, subrotundus, piceus, prothorace margine dilutiore, antennis pedibusque testaceis, nitidulus, elytris crebre sat fortiter punctatis. Long $1\frac{1}{8}$ m.m.

This species, on account of its broad, round form, resembles C. tectiformis, Woll., but the sculpture of the elytra is quite different in C. rotundus. The antennæ are stout; the thorax is shining, and is without sculpture, the pale explanate anterior margin conspicuous. The elytra have very distinct though not coarse punctuation, which is not aciculate, and their surface is quite shining.

Honolulu. Dr. Horn informs me that this is not like the North American species of the genus.

D. S.

Corylophus suturalis, n. sp.—Rotundato-ovalis, convexus, nitidus, piceus, prothorace elytrorumque sutura rufescente, illius margine anteriore albido, antennis pedibusque testaceis, illarum clava fusca; elytris subtilius obsoleteque punctatis. Long. vix 1 m.m.

Only half the size of C. rotundus, and of not quite so rotund form, and with the elytra obsoletely punctured; their punctuation is, however, quite clear when a careful examination is made. Dr. Horn informs me the insect is of the size and appearance of the North American C. truncatus, but that species has the elytra almost absolutely smooth.

Found at the roots of grass, Nuuanu Pate, Oahu.

D. S.

Sericoderus.

Sericoderus basalis, n. sp.—Latior, testaceus, elytris fascia lata basali nigra, crebrius pubescens, subtiliter punctata, subopaca. Long. $1\frac{1}{4}$ m.m.

Antennæ rather short, entirely pale yellow, club not stout. Thorax very broad, reddish yellow, very finely punctate, finely pubescent, the sides and front forming one quite continuous, regular curve. Elytra, densely punctate; pubescent, yellow, with a broad basal fascia occupying quite one-third of their area.

A species readily identified by the broad form and distinct basal fascia. Dr. Horn informs me it is not like any of the North American species.

Found in the salt marshes at Honolulu.

D. S.

Sericoderus pubipennis, n. sp.—Suboblongus, testaceo-ferrugineus, antennis pedibusque testaceis, illarum clava fusca; elytris subtiliter punctatis, longius conspicue pubescentibus. Long. 1 m.m.

Antennæ pale yellow, but with the rather large club abruptly infuscate. Thorax sparingly pubescent. Elytra rather sparingly punctate, so that their surface is shining, but this is much concealed by their conspicuous comparatively elongate pubescence.

The species is very like S. lateralis, but the more sparing punctuation and more conspicuous pubescence leave no doubt it is distinct. Dr. Horn informs me that it differs also from the North American species.

The type was captured at an elevation of about 4000 feet on the mountains of Maui and sent me as No. 419. A second specimen, found on the mountains of Oahu, and sent as No. 365, appears to be immature, and has the antennal club scarcely infuscate.

D. S.

Orthoperus.

Orthoperus æqualis, n. sp.—Minutissimus, anguste ovalis, convexus, sat nitidus, fuscus, antennarum basi pedibusque testaceis, elytris crebre subtilissime punctulatis. Long. $\frac{3}{4}$ m.m.

This atom is similar to O. atomus, Gyll., but is narrower and has a closer punctuation on the elytra, which are less shining. This character distinguishes it also, Dr. Horn informs me, from the North American species. The basal portion of the antenna is clear yellow, the club infuscate.

Beaten from dead wood on Mauna Loa, Hawaii.

D. S.

Fam. HISTERIDÆ.

Bacanius.

Bacanius atomarius, n. sp.—Breviter ovalis, convexus, ferrugineus, sat crebre et fortiter punctatus; mesosterno breve, punctato. Long. 1 m.m.

Thorax very distinctly though rather finely punctate, with basal transverse series of punctures. Elytra rather coarsely punctate, the punctures on the apical portion finer and very dense, some distance internal to the shoulder are the rudiments of two very indistinct short oblique striæ. Pygidium much inflexed, rather closely punctate. Under surface rather coarsely punctate, except on the middle of the breast.

This obscure little insect is very similar to Acritus insularis, but is readily distinguished by the broader tibiæ and invisible scutellum.

No. 344; found near Honolulu.

D. S.

Bacanius confusus, n. sp.—Breviter ovalis, convexus, ferrugineus, confuse nec fortiter punctato-rugatus. Long. $\frac{2}{3}$ m.

Considerably smaller than B. atomarius, Sh., and having much less distinct punctuation. The punctures on the elytra, though not very fine, are obscure and confusedly mixed with indistinct wrinkles. On the under surface, the basal segment of the hind body is strongly, and the sides of the metasternum (also, so far as I can see, the mesosternum) are obscurely, punctured.

A single specimen occurred on Oahu, but the particulars of the capture have been lost.

T. B.

Acritus.

Acritus insularis, n. sp.—Breviter ovalis, sat convexus, nitidus, piceus, antennis pedibusque fuscis; crebre, æqualiter, sat fortiter punctatus. Long. 1 m.m.

Very similar to the European A. minutus, and about the same size but of broader form, darker colour, and with more punctate surface. The punctuation of the thorax is rather fine, and the transverse series of punctures in front of the base is very distinct; the elytra are more coarsely punctate, and the punctuation is evenly distributed over their surface, each puncture being round; there is a very obscure trace of a curved stria on the basal portion. Beneath, the body is impunctate in the middle, but rather coarsely punctate at the sides; the oblique stria on the front of the metasternum is obliquely directed outwards and is rather deep, but it is not looped upwards behind the coxa, and terminates some considerable distance inside of the epimeron.

Found near Honolulu. No. 425.

D. S.

Æletes.

Æletes longipes, n. sp.—Oblongo-ovalis, minus convexus, piceo-ferrugineus, nitidus, lævigatus; metasterno anterius vage lateque impresso. Long. $1\frac{1}{3}$ m.m. (Plate iv., f. 13.)

This insect is less convex than Æ. facilis, and is readily distinguished by its impunctate surface; it is probably allied to Acritus politus, Lec., but that species is described by Horn as possessing a longitudinal groove on the mesosternum, and is smaller; in Æ. longipes there is only to be seen a vague nearly round depression at the junction of the meso- and metasterna.

No. 252. Found at an elevation of 4000 feet, in Hawaii.

D. S.

Æletes concentricus, n. sp.—Ovalis, convexus, ferrugineus, nitidus, crebre obsoleteque curvatim strigosulus; subtus lævigatus, metasterno anterius plano. Long. 1 m.m.

Of rather narrow and convex form, and readily identified by the peculiar sculpture of the upper surface, which is without punctures, but bears extremely fine scratches; on the thorax these are so fine as to be with difficulty observed, but on the elytra they are more distinct, and have a peculiar arrangement, those near the suture about the scutellum being nearly longitudinal in their direction; those outside them are curved inwards towards the suture behind, while the scratches on the more posterior portion are nearly transverse in direction.

I have seen only one specimen, sent as No. 370 by Mr. Blackburn, and found in the mountains near Honolulu.

D. S.

Æletes monticola, n. sp.—Oblongus, convexus, piceo-niger, subtiliter nec inæqualiter punctulatus; elytris subtiliter rugatis. Long. $1\frac{1}{3}$ m.m.

A decidedly narrower insect than Æ. facilis, Sh., and of darker colour; the elytra are very evenly and finely punctured, the punctures here and there running in irregular wrinkles. I cannot discover any punctuation on the metasternum.

A single specimen occurred on Haleakala, Maui, at an elevation of at least 5000 feet.

T. B.

Æletes facilis, n. sp.—Oblongo-ovalis, convexus, piceus, nitidus, crebre punctulatus, punctis ad elytrorum apicem densis et strigosis. Long. $1\frac{1}{3}$ m.m.

The punctuation on the thorax is fine, but quite conspicuous, and there is no basal series; on the elytra it is coarser, and at the apex forms a transverse series of dense longitudinal strigosities; the basal ventral segment is strongly punctate, as is also the metasternum, but on this the punctuation becomes obsolete on the middle; the metasternal stria forms a curved margin to the middle coxa, and extends to the epipleura; the suture in the middle between the mesosternum and metasternum can scarcely be traced, but when seen it is found that the mesosternum is large.

Found near Honolulu. No. 426.

D. S.

Fam. NITIDULIDÆ.

Gonioryctus.

Gonioryctus fugitivus, n. sp.—Haud latus; testaceo-ferrugineus, elytris abdomineque obscure infuscatis; prothorace minus transverso, margine posteriori quam anteriori vix latiori; elytris distincte sulcatis, marginibus pone humeros haud explanatis. Long. 8 m.m.

The antennæ are about as stout and well developed as those of G. latus, but with the fourth joint shorter in proportion to the third. This species can readily be identified by its thorax being only slightly transverse, scarcely wider at the base than in front, with scarcely explanate sides, and by its elytra being more definedly sulcate than in the other described species of the genus, with margins not at all explanate, and only very narrowly reflexed.

In the male the apical dorsal segment is much wider and less acuminate than in the other described species of the genus; the hind margin of this segment is convex, and formed by two slightly curved lines meeting in a well-defined but very obtuse angle, and the segment somewhat abruptly increases its downward slope in the apical third, so that the front and hind portions are in different planes. The small additional segment is ciliate. The apical ventral segment has a large depression (extending from the base, where the depression is narrow, to the apex, where it occupies nearly the whole width), and its hind margin is strongly and widely produced in the middle, and furnished with a fringe of hairs.

The female is unknown to me.

A single specimen was taken by me at an elevation of about 3500 feet, on the mountains near Waimea, Hawaii, on a flower.

T. B.

Gonioryctus similis, n. sp.—Latus; testaceus confuse fusco-vittatus, antennis palpis pedibusque testaceis; prothorace transverso, angulis posticis acute rectis; elytris distincte sulcatis, marginibus pone humeros anguste explanatis. Long. 6 to 7 m.m.

Excessively close to G. latus, but differs in the shape of the thorax, which is not quite so strongly transverse, and has the hinder angles slightly sharper, in the less obsolete sulcation of the elytra, and in the sexual characters.

In the male the apical dorsal segment is formed as in G. latus, except that its hinder portion is slightly turned up, and the hind margin, instead of being simply rounded, is formed by two lines meeting in a well-defined angle. The apical ventral segment resembles that of G. latus.

In the female the apical dorsal segment is pointed as in the male, and has an elongate gently elevated, but well-defined, tubercle near the hind margin. The apical ventral segment has a small obscure depression close to the hind margin, which is rounded.

In all the females of this genus that I have examined, I observe a peculiar sculpture of the apical dorsal segment which has led me to record the presence of a tubercle. The fact is that, along its central line, the segment does not begin to be rounded off downwards so near its base as it does on either side of the central line, so that the central portion of the segment is (near its extremity) raised above the lateral portions, and then slopes off abruptly to the hind margin. In the females of G. latus this structure is much less clearly defined than in those of the other species, but I find no difficulty in discovering traces of it.

I may also observe that a short series of G. latus, recently captured, presents great variety of colour, the specimens varying from a nearly uniform pale testaceous hue, through diverse mixtures of testaceous and dark fuscous, to a nearly uniform blackish fuscous colour.

In the stems of a species of lily, growing near the summit of Konahuanui, Oahu. Apparently very rare.

T. B.

Brachypeplus.

Brachypeplus olinda, n. sp.—Sat latus; convexiusculus; ferrugineo-testaceus, supra obscure æneo-tinctus; parcius pubescens; parum nitidus; capite prothoraceque sat crebre fortiter punctatis, hoc fortiter transverso; elytris obsolete punctato-striatis, interstitiis parce distincte punctatis, lateribus nullo modo explanatis; abdomine crebre nec fortiter punctato. Long. 4 m.m.

This species is allied to B. protinoides, but differs from it as follows:—It is larger and less shining; the antennæ are a little stouter; the thorax is more strongly transverse, and its surface is even (in all my few specimens of B. protinoides there is a more or less defined transverse impression near the base of the thorax resembling that of various European Halticidæ). The rows of punctures on the elytra are in obscure striæ, with the interstices very finely and sparingly (but distinctly) punctured. The whole insect is more closely punctured, and the tarsi are of a uniform clear testaceous colour (in all my specimens of B. protinoides the claw joint is much darker than the rest).

In the male the hind margin of the apical dorsal segment forms a strong rounded emargination, the sides of which (as in B. protinoides) are only moderately produced). The apical ventral segment also is strongly emarginate at the apex.

The female is unknown to me.

A single specimen occurred on Haleakala, Maui, at an elevation of 4000 feet. Probably obtained by beating flowers.

T. B.

Brachypeplus torvus, n. sp.—Haud latus; convexiusculus; nigro-æneus, antennis pedibus prothoraceque lateribus rufescentibus, tarsis nigricantibus; pubescens, sat nitidus; capite prothoraceque obscure crebrius punctatis, hoc rotundato, fortius transverso; elytris subtiliter confuse nec seriatim punctatis, lateribus nullo modo explanatis, abdomine confuse crebrius punctato. Long. $3\frac{2}{3}$ m.m.

Closely allied to B. protinoides, Sh. My specimen (which is a female) differs from the same sex of B. protinoides as follows:—It is a larger insect; the colour is much darker; the thorax is more transverse, with more strongly rounded sides, without the transverse impression near the base, with closer and confused punctuation (in B. protinoides it is very sparing and distinct; the sexes as in others of the genus being differently punctured), and the punctuation of the elytra does not run into lines. From B. olindæ it differs in colour, in the total absence of striæ from the elytra, and (probably) in respect of the sexual characters.

The male is unknown to me.

In the female the hind margin of the apical dorsal segment is rounded, and its extremity is narrowly reflexed. In the same sex of B. protinoides, the corresponding segment has an obscure depression just before the hind margin, which is truncate.

My single specimen of this insect was taken by beating flowers, at an elevation of about 3000 feet, on the Waianae Mountains, Oahu.

T. B.

Brachypeplus koelensis, n. sp.—Haud latus; convexiusculus; sat nitidus, parcius minus breviter pubescens; æneo-niger, antennis, pedibus prothoracis abdominisque lateribus et maculis nonnullis per elytra dispositis, testaceis; capite prothoraceque crebrius fortiter punctatis; hoc vix transverso, antice vix angustato; elytris elongatis, obscure seriatim punctatis, interstitiis vix conspicue punctatis. Long. $3\frac{1}{2}$ m.m.

Rather closely allied to B. protinoides, Sh., but incapable of being treated as a variety of that species, being a narrower, more convex insect, with the thorax less strongly transverse, and scarcely at all narrowed in front. The elytra are longer and more finely punctured, and the sexual character of the only sex known to me is quite different. The narrow convex form and comparatively elongate thorax will separate this insect from all the other species described in the same section of the genus.

In the male the apical dorsal segment of the hind body is strongly, almost semicircularly, excavated behind, the sides of the excavation being produced in short, distinct, acute teeth (as in B. bidens, Sh.).

The female is unknown to me.

I am unable to understand Dr. Sharp's "vix transverso," as applied to the thorax of B. protinoides. In all my specimens the thorax is "fortius trans-

versus," although considerably less strongly transverse than that of several of the other species of the genus. A careful measurement of a number of specimens gives the width to the length as 1 to $\frac{5}{8}$, whereas in B. koelensis the width is to the length as 1 to $\frac{3}{4}$.

A single specimen was obtained by beating flowers at Koele, Lanai, at an elevation of about 2000 feet.

T. B.

Brachypeplus floricola, n. sp.—Latus; convexiusculus; subnitidus; parce pubescens; piceo-niger; antennarum articulus basalibus, pedibus, prothoracis abdominisque lateribus, et elytrorum disco, testaceis, prothoracis disco rufescente; capite prothoraceque crebre fortius punctatis; hoc rotundato, fortiter transverso, antice fortiter angustato; elytris crebre fortius (nullo modo seriatim) punctatis, lateribus haud explanatis; abdomine crebre nec fortiter punctato, prosterno rugose punctato. Long. $4\frac{1}{3}$ m.m.

This very distinct insect differs so widely in system of coloration and shape from B. protinoides, Sh., that at the first sight it might appear out of place in being associated with it, but its proper position is undoubtedly in the B. protinoides group. The very broad build, the thorax almost twice as wide, as long, and with very strongly rounded sides, the coarse but faintly impressed punctures evenly distributed over the whole upper surface, and the rugosity of the prosternum render it impossible to confuse this with any other of the described species.

The male is unknown to me.

In the female the apex of the last dorsal segment of the hind body is simply rounded.

A single specimen occurred on a flower, at an elevation of about 2500 feet, on Waialeale, Kauai.

T. B.

Brachypeplus celatus, n. sp.—Sat latus, aureo-viridis, subopacus, tenuiter sed conspicue pubescens, fortiter punctatus, antennis pedibusque fusco-testaceis; prothorace transversim convexo, elytris angustiore, æquali, lateribus tantum prope angulos posteriores explanatis. Long. $3\frac{1}{2}$, lat. $1\frac{2}{3}$ m.m.

Antennæ short, third joint but little longer than the second. Head coarsely punctate, with large eyes. Thorax very coarsely punctured, rather narrow and convex, with curved sides and obtuse angles, and very slightly narrowed in front. Elytra with quite distinct regular series of punctures, and with the interstices finely seriate-punctate. Hind body coarsely punctate. The specimen described has the apex of the last dorsal plate rather deeply notched; Mr. Blackburn informs me that the other sex has this part gently rounded, and the plate itself is a good deal curved longitudinally towards the extremity. This is a distinct species of the B. tinctus and B. protinoides group.

Found on Mauna Loa, Hawaii, at an elevation of 6000 feet.

D. S.

Brachypeplus apertus, n. sp. — Angustior sat convexus, viridescens, parce pubescens nitidus, antennis rufescentibus, pedibus testaceis; fortiter punctatus, prothorace transversim convexo, æquali, lateribus tantum prope angulos posteriores explanatis. Long. 3½, lat. 1⅓ m.m.

So far as I can judge from one specimen, much rubbed and in bad condition, this is a species closely allied to B. celatus, but narrower, more convex, and more shining, and with the dorsal segments of the hind body less punctate, and yellowish behind. This specimen has the apical dorsal plate a little sinuate at the side behind, so as to make the apex appear a little prolonged, the hind margin being gently rounded, nearly truncate. Mr. Blackburn informs me that the other sex has the hind margin semicircularly emarginate, so that it would seem the sexual characters are much the same as in B. celatus.

B. apertus, Sh., may be distinguished from all the four species preceding it above by its much coarser punctuation, especially by the greater coarseness of the punctures that form rows on the elytra. B. celatus, Sh., by its depressed form and less abrupt upward curve of the prosternal process.

Found in the same locality as B. celatus.

D. S.

Brachypeplus quadraticollis, n. sp.—Haud latus, convexiusculus, nitidus; castaneus, supra æneo-micans; prothoracis lateribus, pedibus, antennarumque basi testaceis; capite prothoraceque crebre fortiter punctatis; hoc parum transverso, antice leviter angustato, ad angulos posteriores minus deplanato, lateribus parum rotundatis, angulis posticis subrectis; elytris longioribus, distincte striatis, postice confuse punctatis, striis obscure punctatis, interstitiis subconvexis seriatim punctatis abdomine crebrius fortiter punctato. Long. 4¼ m.m.

This pretty little insect superficially resembles the species of the B. protinoides group, but the form of the prosternal process (which I quite agree with Dr. Sharp in considering a character of the first importance) would associate it with B. discedens, Sh. Its convex form, very evidently (almost deeply) striated elytra, and subquadrate thorax are quite sufficient to distinguish it from all its allies. It should be placed, I think, at the head of the B. discedens group.

In the male the apical dorsal segment has an obscure depression near the hind margin, and the additional segment is only slightly visible.

The female is unknown to me.

A single specimen occurred on a flower of Freycinetia on Mauna Loa, Hawaii, at an elevation of about 4000 feet.

T. B.

Brachypeplus parallelus, n. sp.—Sub-parallelus, elongatus, subdepressus, pubescens; parum nitidus; obscure viridiæneus, antennis pedibus et prothoracis lateribus testaceis; capite prothoraceque crebre fortiter punctatis; illo sat magno;

hoc transverso, antice parum angustato, lateribus parum rotundatis, angulis posticis obtusis; elytris sat elongatis, obscure striatis, striis distincte (interstitiis subtilius) punctatis; abdomine crebrius fortiter punctato. Long. 5 m.m.

Closely allied to B. vestitus, Sh., but easily separable by its elongate very parallel form and less strongly transverse thorax, different punctuation, greater size, &c.

In what I regard as the male the apical dorsal segment is truncate behind, a small additional segment being barely visible. The front tibiæ are very strongly curved.

The other sex is unknown to me.

A single specimen occurred on one of the mountains of Lanai, at an elevation of about 2000 feet. It was obtained by beating flowers.

T. B.

Brachypeplus expers, n. sp.—Brevis, latus, parum depressus, opacus, pubescens, rufopiceus; capite prothoraceque obscure crebre punctatis; hoc fortiter transverso, dorso tri-impresso; elytris inæqualibus, striatis, haud distincte punctatis; abdomine crasse obscure punctato. Long. 6 m.m., lat. $2\frac{7}{8}$ m.m.

Rather closely allied to B. sordidus, Sh., but considerably wider; the width across the elytra, moreover, is distinctly greater than the length of the elytra (in B. sordidus it is about equal to it), and the lateral margins of the elytra, though not strongly explanate, are decidedly more so than in B. sordidus. The unevenness of the upper surface is sufficient to distinguish this species from B. guttatus, Sh., and B. robustus, Sh. (the only other described allies).

The prosternal process is somewhat curved upwards at the apex (less so than in B. sordidus, more than in B. guttatus or B. robustus), and very obscurely ciliated.

I regard my specimen as a male; the apical dorsal segment is rather short, is truncated (not very abruptly) behind, and leaves exposed a very short supplementary segment.

The other sex is unknown to me.

A single specimen occurred under the bark of a tree on Haleakala, Maui, at an elevation of about 4000 feet.

T. B.

Brachypeplus spretus, n. sp.—Sat latus, subdepressus, subnitidus, parce pubescens, nigrofuscus (feminis nonnullis omnino testaceis); antennarum basi, pedibus, thoracis elytrorum abdominisque marginibus lateralibus, et (nonnullis exemplis) maculis duabus prope scutellum positis, testaceis; prothorace transverso, antrorsum angustato, lateribus explanatis sat rotundatis, disco profunde tri vel quadri impresso; elytris inæqualibus, striatis, parum elongatis; abdomine parcius subtiliter punctato. Long. $3\frac{3}{4}$—$4\frac{3}{4}$ m.m.

Allied to B. inæqualis and B. striatus. From the former it is distinguished by its shorter (but scarcely narrower) elytra, which together form almost a square, its smaller thorax less strongly rounded on the sides, and the finer punctuation of the hind body. Compared with B. striatus it is a more shining insect, with shorter and less strongly striated elytra, and much finer and more sparing punctuation of hind body. Its broad build and sexual characters separate it from B. bicolor and B. impressus, and the uneven surface of the elytra and punctuation of hind body from B. omalioides.

In the male the apical dorsal segment is rather wide (as in B. inæqualis), and is abruptly truncate; there is a distinct, but not elongate, supplementary segment.

This species occurs at an elevation of about 4000 feet, on Haleakala, Maui, where it is procured by beating dead branches of trees. It probably represents (on Maui) B. inæqualis (from Oahu), and B. striatus (from Hawaii).

T. B.

Brachypeplus bicolor, n. sp.—Sat latus, nitidus, piceo-niger; pedibus, thoracis abdominisque lateribus, et gutta circa elytrorum suturam magna apicali, ferrugineis; prothorace transverso, lateribus sat rotundatis parum explanatis, disco tri-vel quadri-impresso; elytris inæqualibus obscure striatis striis sat fortiter punctatis; abdomine fortiter sat crebre punctato. Long. $3\frac{1}{3}$. m.m.

Allied to B. inæqualis, but slightly smaller and narrower; the thorax is not so strongly transverse; its hinder angles are less pronounced, and the margins of the elytra are straighter and only slightly explanate. The last named character, together with the dark antennæ and large, well-defined, rusty blotch on the nearly black elytra around the hind part of the suture, will readily distinguish this insect from all its described allies.

In the male the apical dorsal segment is truncate behind, leaving exposed a very distinct and rather elongate supplementary segment.

The female is unknown to me.

A single specimen was taken under the bark of a tree on Mauna Loa, Hawaii, at an elevation of nearly 5000 feet.

T. B.

[I may here call attention to the existence of the following:—

(*a*) An insect occurring on Kauai closely allied to B. discedens, Sh. (which I will call var. Kauaiensis of the same). It is probably entitled in reality to specific rank as representing a distinct local type, which circumstances are likely to render permanent or still farther differentiate; but it will perhaps for the present be more conveniently regarded as a variety. It is distinguished from its near ally as follows:—It is smaller (long. $3\frac{3}{4}$–4 m.m.), the colour is brighter—the antennæ

especially being entirely testaceous; the elytra are longer, and the apical dorsal segment in both sexes is wider and less narrowed behind. I have not taken typical B. discedens on Kauai.

(*b*) An insect occurring on Lanai closely allied to B. blackburni, Sh. (which I will call var. Lanaiensis). It differs from the type (which does not appear to occur on Lanai) in its greatly smaller size (Long. $2\frac{2}{3}$ m.m.), more parallel form, and paler antennæ.

T. B.]

[As I was unable, when forwarding to Dr. Sharp the specimens on which he founded his descriptions of most of the species in this genus, to supply him with sufficient material for a satisfactory report on the sexual characters of many of the insects he described, I think it will be well for me to append some remarks on the subject, founded on the somewhat larger (but still scanty) material now in my own collection. A study of the sexual characters of the Hawaiian Brachypepli strikingly confirms Dr. Sharp's division of the species into groups; I will therefore put my remarks into the form of a brief statement of the sexual characters of the several groups, together with such additional notes as may seem desirable.

Group I.

B. tinctus, Sh.; apertus, Sh.; protinoides, Sh.; torvus, Bl.; koelensis, Bl.; bidens, Sh.; olindæ, Bl.; floricola, Bl.; inauratus, Sh.; affinis, Sh.; celatus, Sh.

This group is flower-frequenting in the strict sense, being found on fresh flowers.

Apical dorsal segment of male emarginate, with sides of emargination produced. Supplementary segment not well developed.

The sexes of B. tinctus have been well described by Dr. Sharp. I may add that in my male specimen the hind body is dark fuscous down the middle, while the hind body of the female is clear testaceous. The males of B. protinoides (*vide* Trans. Ent. Soc., 1881, part iv. p. 510), B. bidens, inauratus, and affinis, also have been well described by Dr. Sharp; and I have myself described those of the others, except B. torvus and floricola, of which I have seen only the female.

Group II.

B. quadraticollis, Bl.; discedens, Sh.; metallescens, Sh.; parallelus, Bl.; vestitus, Bl.; varius, Sh.

These species are not exclusively flower frequenting. Though generally obtained by beating flowers, they appear to be connected chiefly with the flower

stems, which in various species of lily and palm are enfolded by the bases of the leaves, and contain much moisture. When I have found the insects on flowers, it has usually been on large flowers with fleshy petals, some portion of which has been in a state of decay.

Apical dorsal segment of male, truncate or absolutely emarginate, with short supplementary segment. Tarsi of male thicker than of female. Head and thorax of male more closely punctured.

The whole of the above characters seem to be strongly marked only in B. discedens and metallescens (where the two sexes might pass for distinct species), but I can trace two or more of them in the others. The curvature of the front tibiæ in B. vestitus (and doubtless in B. parallelus) appears in both sexes.

The specimen of B. vestitus described by Dr. Sharp was, I think, a female; in the male there is a short supplementary segment.

Group III.

B. blackburni, Sh.

This insect seems to be connected with flowers and other vegetable matter when in a state of decay.

Sexual characters very slightly marked, the apical dorsal segment of male being truncate or obscurely emarginate behind, with a very indistinct supplementary segment.

Group IV.

B. robustus, Sh.; guttatus, Sh.; sordidus, Sh.; expers, Bl.

All the species have occurred on large solid trees, usually at exuding sap. Sexual characters slight. There is a more or less distinct supplementary segment in the male, and this sex is usually smaller and narrower than the female.

Groups V. and VI.

B. reitteri, Sh.; infimus, Sh.

These insects are found in very wet vegetable matter; one of them between the layers of banana stems, the other under the thin bark or rind of what I believe to be a species of bamboo.

Sexual characters very well defined (see Dr. Sharp's descriptions). I may add that in B. infimus the supplementary segment of the male is of remarkable form, being abruptly vertical.

Group VII.

B. obsoletus, Sh.; omalioides, Sh.; aper, Sh.; explanatus, Sh.; brevis, Sh.; spretus, Bl.; inæqualis, Sh.; striatus, Sh.; bicolor, Bl.; impressus, Sh.

These insects are usually found in decaying vegetable matter, especially on the Freycinetia, where the decay of the basal parts of the leaves and of the fleshy interior of the flowers furnishes them with sustenance; they also occur in decaying fern stalks, and occasionally under bark.

Hind body of male acuminate behind; supplementary segment generally well—sometimes very strongly—developed. Female usually coloured differently from the male.

The tendency to paleness of colour in the female is a very singular character. It is not absolutely invariable; that is to say, the lightest coloured males and darkest females (in my series of the two or three species of which I possess a fairly long series) are not much unlike each other; but the great majority of females are so much paler than the great majority of the males that at first sight one would take them to be different species.

The following notes on the sexual characters of some of the species supply information that the material in Dr. Sharp's hands has not enabled him to furnish :—

B. obsoletus. My material is insufficient for generalization regarding colour; the one female I possess is paler than my one male, however.

B. omalioides. Male almost always much clouded with fuscous, sometimes nearly black; its supplementary segment not large; female almost uniformly testaceous.

B. aper. My material is insufficient for generalization regarding colour.

B. explanatus. Female not known.

B. brevis. The average colour of the female is very decidedly paler than that of the male.

B. spretus. In my short series of this species two-thirds of the females are only a little paler that the lightest-coloured male, the remaining third are quite pale testaceous.

B. inæqualis. I have examined only one male specimen; it has the supplementary segment less distinct than usual in this group. It is very much darker in colour than the female, which is evidently the sex described by Dr. Sharp.

B. striatus. In this, and especially in the two species following it, the supplementary segment of the male is very strongly developed, appearing in B. impressus like a narrow more or less elongate plate, with almost parallel sides. The female of striatus (so far as my material furnishes evidence) is usually only a little paler than the male in colour. Of B. impressus one of my female specimens has the hind body bright clear yellow, while in the other it is of a similar tint, but slightly clouded with fuscous.

T. B.]

Fam. COLYDIIDÆ.

Eulachus.

Eulachus hispidus, n. sp.—Parum elongatus, angustulus, parallelus subconvexus, rufobrunneus; setis albidis vestitus; prothorace vix transverso, obscure punctato, lateribus obscure crenulatis, disco profunde impresso, basi utrinque acute producto, elytris obscure seriatim punctatis, interstitiis opacis, haud distincte punctatis. Long. 3 m.m.

This peculiar little insect has much the appearance of a Ditoma. The sides of the thorax are crenulated, the basal crenulation being produced into an acute tooth. The details of form and sculpture, however, are hidden by rows (six on the thorax and the same number on each of the elytra), of white erect setæ, very similar to those of certain Proterhini.

I have attributed this insect to Eulachus; but, as I have not the opportunity of actual comparison with that genus, my reference must be partly conjectural, though it cannot be far wide of the mark.

It may be desirable to record the following characters of E. hispidus:—Eyes rather finely facetted, large, and very prominent; antennæ inserted under the margin of the forehead, thick, and longer than the thorax; joints one to four longer than broad, five to nine transverse, ten and eleven forming a well-defined club, of which the former joint is transverse, the latter elongate; front tibiæ finely spinous and enlarged at the apex, where there is a bent spine; the other tibiæ sparingly clothed with scales, but not spined, and only slightly enlarged towards the apex; joints one to three of the tarsi gradually decreasing in length; joint four about equal to the sum of the others; anterior coxæ contiguous. There is a large, profound, and nearly circular impression (possibly sexual) near the apex of the metasternum, and the basal segment of the hind body is considerably longer than the others.

A single specimen occurred near Honolulu under the bark of a tree, at an elevation of about 1000 feet, probably connected with the excavations of a species of Bostrichidæ.

T. B.

Fam. CUCUJIDÆ.

Brontolæmus (nov. gen.).

Antennæ corpore longiores, tenuissimæ, articulis, 3–11 inter se subæqualibus. Clypeus ante antennas productus, mandibulæ prorectæ, subrectæ, basi lato, apice acuminato, minute emarginato, vix incurvato. Palpi graciles. Pedes graciles, tibiis calcari minuto, recto: tarsi posteriores maris 4-articulati, sed articulo basali brevissimo ægre discernendo; feminæ 5-articulati articulo basali fere nullo.

The elegant little insect, for which I propose this generic name, does not appear to be at all closely allied to any known genus, but may be best placed near Læmophlœus, with which it agrees in many characters, but differs in the form of the head, the slender legs, antennæ, and palpi, and the comparatively elongate little curved mandibles. The structure of the antennæ is peculiar: the basal joint is stout and elongate; the second is rather slender, shorter than any of the others, about half as long as the first; the third is subequal to the following joints, each of which is very slender, and is slightly swollen at the apex. Each of the three terminal joints is a little curved, more especially the last one.

D. S.

Brontolæmus elegans, n. sp.—Subdepressus, opacus, squamulis setiformibus depressis parce et irregulariter vestitus, fuscus, antennis pedibusque plus minusve dilutioribus; prothorace subcordato, basi elytris angustiore, intra latus linea recta subtili; elytris planatis, striatis, versus latera argute carinatis, lateribus perpendicularibus. Long. 3 m.m. (Plate iv., f. 16.)

Antennæ in the female rather longer than the body; in the male about twice as long; head rather narrower than the thorax, with an indistinct reticulate sculpture, and with fine depressed, pale setæ; eyes convex; thorax rounded at the sides and narrowed behind, so that it leaves the shoulders of the elytra free; hind angles nearly rectangular, the surface sculptured and clothed like the head, and with a fine straight line on each side; scutellum transverse, with declivous front; elytra truncate at the base, prolonged and subacuminate behind, bordered with a well-marked carina, extending from the shoulder to near the apex; within this carina quite flat, but external to it perpendicular, so that there is a rather large lateral portion placed at right angles to the rest of the surface; they are rather feebly striate, the striæ being evidently marked with punctures; they are quite dull, and obscurely maculate, the maculation being due to an irregular distribution of the pale scale-like hairs they bear. The slender legs are yellow, more or less infuscate.

A pair of this species has been sent me by Mr. Blackburn as No. 335. He states that it is a very rare insect, but widely distributed, and occurs both in Oahu and Kauai; it occurs in crevices of the bark of living trees, and runs almost like a Longicorn.

D. S.

Læmophlœus.

Læmophlœus æneus, n. sp.—Depressus, latus, nitidus, niger, supra æneo-micans, antennis pedibusque fusco-rufis; clypeo anterius recte truncato; prothorace fortiter transverso, intra latus linea impressa; elytris profunde striatis, ecostatis, interstitiis fere lavigatis. Long. $2\frac{1}{2}$ m.m.

I have seen only one specimen, but suppose from its large head it may be a male. The antennæ are not very elongate, and do not reach the extremity of the elytra; the third and following joints are conspicuously setose; the three terminal joints rather elongate, but scarcely as long as the five preceding together. Head as broad as the thorax, short; eyes very convex; rather coarsely punctate; clypeus quite straight in front; the angular transverse depression rather broad and deep, but indefinite; central channel obsolete; intra-ocular line fine but distinct. Thorax nearly twice as broad as long, a little narrowed behind, rather coarsely punctate, side without margin, but at a little distance within it there is a very fine line, and at a greater distance inwards from this a second line, continuous with the intra-ocular line. Scutellum large, with two or three punctures. Elytra shining brassy, without trace of pubescence, deeply striate, each with six rather deep striæ, but with no trace of any costæ, either submarginal or interstitial.

Sent as No. 394, and found by Mr. Blackburn, beaten from bark of large Koa tree, at an elevation of 4000 or 5000 feet, on Haleakala, Maui; much searching produced only two specimens. That retained by Mr. Blackburn attains $3\frac{1}{2}$ m.m. in length, but in other respects, he tells me, does not differ from the one described.

D. S.

Monanus.

Monanus brevicornis, n. sp.—Ferrugineus, angustus, fortiter punctatus; antennis brevibus incrassatis; prothorace subelongato, postice parum angustato, fortiter punctato, lateribus crenulatis; elytris fortiter seriatim punctatis, pube vestitis. Long $2\frac{1}{3}$ m.m.

Closely allied to M. crenatus, Sh., but much narrower and more parallel, with thicker antennæ, which are distinctly shorter than the head and thorax, the last three joints being distinctly larger than the rest, the ninth and tenth rather strongly transverse. The thorax is more elongate than that of M. crenatus, and very little contracted behind.

T. B.

Telephanus.

Telephanus insularis, n. sp.—Brevior, testaceus, parcius pubescens, elytris nigro-trimaculatis, antennis articulis tribus penultimis nigricantibus; prothorace fortiter transverso, lateribus parum perspicue denticulatis. Long. $2\frac{2}{3}$ m.m.

Antennæ rather short, the tenth joint being only about as long as broad, terminal joint very pale. Thorax very strongly transverse, and much narrowed behind at each side, with three quite short teeth, and with two very obscure denticulations in front of these. Elytra on the middle of each, with a transverse spot, the two nearly or quite joining at the suture, and quite close to the apex, with a third common spot on the suture.

This is similar to several very closely allied species found in the Indo-Malasian regions, but does not seem to agree with any of them, although closely allied to T. cruciger, Wat., from New Guinea.

Found in Honolulu and Kauai; I have an individual before me from each locality, sent by Mr. Blackburn as Nos. 54 and 201 respectively. That from Kauai has the elytral spots rather larger, and connected together, a slender line of dark colour extending along the suture to connect the apical spot with the medial spots; in other respects they agree exactly.

D. S.

Telephanus pallidipennis, n. sp.—Elongatus, subnitidus; pube longa parcius vestitus, testaceus, antennarum articulis 8vo–10mo nigro-fuscis, elytrorum disco et apice transversim infuscatis; prothorace transverso, creberrime minus fortiter punctato, postice vix angustato, lateribus parum rotundatis irregulariter crenulatis, elytris oblongo-ovatis, fortiter seriatim punctatis, interstitiis subtiliter punctatis. Long. $4\frac{1}{4}$ m.m.

This insect is closely allied to T. insularis, Sh., but differs as follows:—it is larger, differently shaped (the anterior half of the elytra being nearly parallel, but slightly increasing in width backwards, the posterior half gradually but rather strongly contracted), the thorax is much more closely and a little more finely punctured, less narrowed behind, and with the lateral teeth much less defined and differently placed (there are two obscure and blunt teeth close together near the anterior margin, then an interval, and then four teeth increasing in size backwards, the first being a little in front of the middle, and very minute, the last not at all large, and close to the base of the thorax). My specimen is nearly of a uniform testaceous colour, but may be abnormally pale, as there are faint indications of markings similar to those of T. insularis, Sh.

A single specimen was obtained by sifting dead leaves in a mountain forest near Honolulu.

T. B.

Fam. CRYPTOPHAGIDÆ.

Telmatophilus.

Telmatophilus debilis, n. sp.—Angustulus, parum convexus, testaceus, evidenter pubescens, minus crebre sat fortiter punctatus; prothorace fortiter transverso; tarsis gracilibus. Long. 2 m.m.

Antennæ rather stout, third joint a little longer than any of the others, the three terminal joints a good deal broader, the ninth and tenth being evidently broader than long. Thorax twice as broad as long, the sides conspicuously margined, but without any teeth or prominences, only very slightly narrowed behind; rather coarsely, not densely punctate; the base with a small fovea on each side. Elytra not densely, rather coarsely, punctate at the base, but the punctuation becoming quite obsolete before the extremity.

I have only a single example at my disposal, and only refer it to the genus Telmatophilus with hesitation, the tarsi being more slender than they are in the known species of that genus. In the individual at my disposal the feet have been covered with gum tragacanth, and their structure is hence very obscure; but they are quite slender, not flattened out, and the basal joint of the hind tarsus is elongate, longer than the two following together; the second and third appear to be about equal, except that the third is produced beneath the following joint, so as to form a rather elongate lobe, the fourth joint is quite slender, and nearly as long as the three preceding together. I cannot see any evidence of a minute joint at its base, neither can I see any division on the basal joint, and if this be correct the tarsi are only four-jointed.

Found at an elevation of about 2000 feet, in the island of Oahu, and sent by Mr. Blackburn as No. 198.

D. S.

Fam. EROTYLIDÆ.

Euxestus.

Euxestus minor, n. sp.—Breviter ovalis, convexus, glaber, nitidus, parce punctatus, piceus antennis pedibusque testaceis; illis clava magna, sub-circulari, uniarticulata. Long. 1¾ m.m. (Plate iv., f. 14.)

Antennæ only seven or eight jointed, the fourth and fifth joints being coalesced with the elongate third joint, and even the sixth not sharply separated, the penultimate joint scarcely broader than that preceding it, and very abruptly contrasted with the large terminal joint. Thorax very convex transversely, distinctly lobed in the middle, finely and sparingly punctate; elytra finely and sparingly punctate. Among the punctures may be detected some very fine regular series.

Found in Oahu, and sent as No. 109 by Mr. Blackburn. I have specimens scarcely differing from Malacca.

D. S.

Eidoreus (nov. gen.).

This generic name is proposed for a very minute insect of rotund form, allied to Hypodacne and Euxestus. The head is broad and very short; and the small eyes, consisting of a few coarse facets, are placed as it were on a prominent free angle at the front of the side; the antennæ are short and apparently ten-jointed, the basal joint rather large, the second smaller, third not elongate, fourth to eighth small and short, ninth and tenth forming a large loosely articulated club. The middle and hind coxæ are very widely separated, the front ones only moderately; the metasternum is much produced in the middle between the coxæ, so that it touches the prosternum, and no portion of the mesosternum is visible. The tarsi are small, four-jointed, the three basal joints not differing much, the third simple, the fourth elongate; the hind tarsi are longer and more slender than the others, and their basal joint is more elongate.

D. S.

Eidoreus minutus, n. sp.—Rotundato-ovalis, sat convexus, nitidus, testaceus, glaber, fere impunctatus; antennis brevibus, clava laxe bi-articulata. Long. 1 m.m.

Antennæ about as long as the thorax; this strongly transverse, closely applied to and continuous with the elytra, truncate at the base, a little narrowed towards the front margin, shining and almost impunctate, as are also the elytra.

Two fragmentary specimens have been sent me as No. 336.

D. S.

Fam. COCCINELLIDÆ.

Scymnus.

Scymnus vividus, n. sp.—Læte rufus, pectore, abdomine, prothorace posterius in medio, elytrorumque plaga magna, communi, triangulari, nigris, femoribus posterioribus et intermediis fuscis; elytris fortiter punctatis, pubescentia pallida conspicua vestitis. Long. $2\frac{1}{4}$ m.m.

Antennæ and palpi yellow. Head and thorax yellowish-red; the latter in the middle, with a very large black mark extending nearly to the front margin; not closely and rather obsoletely punctured. Elytra bright red, with a large triangular mark black; the base of the triangle occupies the greater part of the width of the elytra at the base, and the apex is placed on the suture near the extremity; the punctuation is not dense, but is rather coarse, especially on the black portion. Beneath, the sides of the thorax are pale, the middle blackish, the breast and ventral segments black, the epipleuræ bright yellowish-red.

The black patch of the elytra sometimes extends to the sides, and covers all the basal portion. The species is allied to a Californian one returned to me from Dr. Leconte a few years ago without name, but is apparently distinct.

D. S.

Scymnus ocellatus, n. sp.—Parvus, rotundulus, obsolete punctatus, conspicue pubescens, testaceus, prothorace in medio elytrisque signaturis nigro-fuscis, corpore subtus exparte majore nigricante. Long. $1\frac{1}{2}$ m.m.

This small insect has peculiar markings: there is a large triangular black mark round the scutellum, which is prolonged backwards along the suture, and just behind the middle is turned outwards on each side, so as to form a curved transverse prolongation, and just in front of the termination of this is a circular spot; the outer margin is also dark, the dark colour being, however, nearly divided on a line with the termination of the curved mark. The punctuation of the surface is very obsolete, though the pubescence is conspicuous. A second specimen has the under surface pale, and the dark thoracic mark nearly absent, perhaps indicating immaturity.

D. S.

Scymnus discedens, n. sp.—Minutus, valde convexus, testaceus, nitidus, obsolete punctatus, parum perspicue pubescens; metasterno anterius inter coxas intermedias linea abrupte curvata, longius producta. Long. $1\frac{1}{4}$ m.m.

Thorax impunctate, with an extremely delicate pubescence easily removed, then appearing shining. Elytra more distinctly punctured than the thorax, but still only finely and obsolete; upper surface entirely yellow; the thorax scarcely darker; under surface more ferruginous.

This little insect, of which I have seen but a single specimen, will probably prove to be the type of a new genus, owing to the fact that the metasternum is distinguished from the mesosternum by a remarkably distinct raised line, which is greatly produced in front, so that the mesosternum is much reduced.

The species is rare; Mr. Blackburn has twice found it by sweeping, in Oahu. No. 337.

D. S.

Fam. DERMESTIDÆ.

Attagenus.

Attagenus plebeius, n. sp.—Sat elongatus, opacus, dense pubescens, niger, antennis pedibusque rufis, capite, thorace, elytrorumque fascia angusta, angulata, subbasali pubescentiæ pallidæ. Long. 4–$4\frac{1}{2}$ m.m.

Similar in size, form, and appearance to the European A. verbasci, but with only one pale band on the elytra. The specimens described are probably of the

female sex, and have the antennæ short, the club three-jointed, and in length equal to the five or six preceding joints together; the apical joint but little longer than the tenth; thorax densely pubescent, so that its punctuation is concealed; the pubescence pale, but in certain lights appearing dark on the middle parts, owing apparently to an admixture of spots or patches of black pubescence; elytra not quite so densely pubescent as the thorax; the pubescence black, but there is a conspicuous band of cinereous pubescence near the base, which at the suture is strongly angulated in front, so as to approach rather near to the scutellum; legs entirely red.

Found in the houses of Honolulu. Sent as No. 427.

D. S.

Labrocerus (nov. gen.).

Antennæ eleven-jointed, scarcely clavate, in the male with elongate terminal joint, hirsute, conspicuously and peculiarly so in the male; prosternum rather short, not at all directed upwards, but rather slightly deflexed in front in the middle, so as to form a protection for the parts of the mouth which are covered by it, except the labrum, which is completely exposed; antennal fossæ not present; prosternal process rather broad and flat, received into the mesosternum; middle coxæ but little separated; hind coxal lamina of moderate size.

This genus is allied to Attagenus and Perimegatoma, but with a quite different structure of prosternum from the former, and possessing probably a much shorter prosternum than the latter genus. It is possible, indeed, that Perimegatoma is but a synonym of Megatoma, this European genus having been stated by error in Lacordaire to possess antennal fossæ. From Megatoma Labrocerus is, I think, certainly distinct by its prosternal structure, the prosternum being but short and little rounded in front, the prosternal process more developed, and the mesosternal fossa extending quite to the metasternum: as in Megatoma, the sides of the prosternum are concave, but there is no true antennal fossa.

D. S.

Labrocerus jaynei, n. sp.—Suboblongus, parum convexus, niger, haud dense pubescens, antennarum basi sordide testaceio, elytris maculis quatuor fulvis, duabus anterioribus fere in fasciam curvatam conjunctis. Long. $3\frac{1}{2}$ m.m.

Antennæ in the male as long as the head and thorax; second joint quite short, subglobular; third quite small and rather closely connected with the fourth; this latter and the two following joints somewhat short, and a little produced and acuminate inwardly; joints seven to ten rather broader, each very strongly transverse; terminal joint as long as the five preceding together. In the female the antennæ are about as long as the head; the third joint is slender and rather elongate,

being in fact slightly longer than the much broader subglobular second joint; of joints four to ten, each is a little broader than its predecessor, the tenth being strongly transverse; terminal joint rather large, longer than the two preceding together. The thorax is sinuate on each side, the hind angles being a little produced backwards and acute; its pubescence is rather long and scanty, but it is almost without punctuation. Elytra rather elongate, with pubescence and obscure punctuation similar to the thorax; from the shoulder of each there descends a yellowish fascia towards the suture, but the two do not quite meet, and behind the middle there is a large yellow spot.

I have named this species in honour of Dr. Horace F. Jayne, who has recently published a memoir on the North American allies, adding considerably to our knowledge of these neglected insects. I have received only one pair of L. jaynei from Mr. Blackburn as No. 392; they were beaten from dead wood on Haleakala, Maui, and I am told by Mr. Blackburn that the markings of the elytra are very variable.

D. S.

Labrocerus concolor, n. sp.—Minus elongatus, niger, nigro-pubescens, antennis in medio tarsisque picescentibus; elytris subtiliter granulatis, granulis versus apicem obsoletis. Long. 3 m.m.

This species, so far as I can judge from a single male, is allied to L. jaynei, but is abundantly distinct by the shorter form and by the granulate sculpture of the elytra; the male antennæ are similarly formed, but are less elongate, and have a considerably shorter terminal joint.

Sent by Mr. Blackburn as No. 461, and found by beating dead branches of trees at an elevation of about 6000 feet on Mauna Loa, Hawaii.

D. S.

Labrocerus obscurus, n. sp.—Minus elongatus, haud dense pubescens, niger, antennis obscure testaceis; elytris obscure granulatis, maculis quatuor fulvis (duabus anterioribus fere in fasciam curvatam conjunctis) notatis. Long. 3 m.m.

This species is almost of the shape of L. concolor, Sh., with the markings of L. jaynei, Sh. The pubescence resembles that of L. jaynei; and the elytra are granulate as in L. concolor. My single specimen appears to be a female, and differs from the same sex in the other species of the genus in having considerably shorter and more slender antennæ.

I have a single female specimen of Labrocerus from the Waianae mountains, Oahu; apparently very close to L. jaynei, but narrower and more elongate, with more slender antennæ, and dark slender legs. Unfortunately, it is not in sufficiently good condition to serve as the type of a new species.

Taken by beating dead branches of trees on Mauna Loa, Hawaii, at an elevation of about 6000 feet.

T. B.

Cryptorhopalum.

Cryptorhopalum brevicorne, n. sp.—Sat convexum, nitidum, parce nigro-pubescens, parce subtiliter punctatum, nigrum, antennis pedibusque testaceis. Long. 2–3½ m.m.

This species is similar in appearance to C. triste, Lec., but has the legs and antennæ pale, and in the structure of the antennæ and prosternum is quite different, so that it is but doubtfully congeneric therewith, although in the present very unsatisfactory state of the arrangement of the exotic forms of these obscure Dermestidæ I think it best classed in Cryptorhopalum. The antennæ are very short and are pale yellow, their club is subcircular, larger in the male than in the female, and in the former sex is formed nearly entirely by the terminal joint, while in the female nearly one-third of it is formed by the penultimate joint. The hind angles of the thorax are nearly rectangular but slightly obtuse. The prosternum is more rounded and produced in front than it is in C. triste, and the antennal fossæ have a shining surface, are broad and short, and not very definitely limited. The under surface is clothed with a scanty cinereous pubescence, and the pale colour of the legs extends even to the coxæ.

Four specimens of this species have been sent me by Mr. Blackburn as Nos. 26 and 213; the species is found in the houses at Honolulu.

D. S.

Cryptorhopalum terminale, n. sp.—Breviter ovale, convexum parce griseo-pubescens, nigrum, elytris in medio et late ad apicem rufis, antennis, tibiis tarsisque testaceis. Long. 2¾ m.m.

The female has the antennæ very short, with sub-circular two-jointed club, but the terminal joint much larger than the other joints; from the third to the club, very small and difficult to count. The upper surface is rather sparingly punctate, and has a rough but not dense pale pubesence, which does not form bands, except that on the dark fasciæ of the elytra it is less distinct and darker in colour; the hind angles of the thorax are nearly rectangular. The apical one-third or two-fifths of the wing cases is red; then in front of this there is across the middle a medial black band, and in front of this a red one, the base being black, these three basal bands of colour being about of one width.

I have received three specimens as No. 47; they are, no doubt, females; although probably a species introduced into the islands, it does not agree with any of the descriptions of the numerous New World species of this genus recently described by Reitter.

D. S.

Fam. EUCNEMIDÆ.

Fornax.

Fornax bonvouloiri, n. sp.—Ferrugineus, subopacus, crebre punctatus, tenuiter fulvo-pubescens; elytris posterius attenuatis, leviter striatis; prothoracis canaliculis lateralibus usque angulos posteriores haud productis; fronte ecarinata. Long. $5\frac{1}{2}$ m.m. (Plate iv., f. 17.)

Antennæ slender and elongate, pale red, very broken at the insertion of the second joint; basal joint as long as the three following together; second joint twice as long as broad; third about one and a-half times the length of the second; fourth shorter than second; fifth longer than the fourth, but still shorter than the second; sixth quite as long as second; seven to ten subequal, each a little shorter than the third; terminal joint longer than the third, but not quite so long as the basal joint. Head rather finely punctate, without longitudinal or transverse carina. Thorax rather finely and closely punctate. Elytra finely striate, interstices closely punctate.

According to Comte de Bonvouloir's monograph, there are but two species of Fornax in which the prothoracic channels do not attain the hind angles; and one of these, F. debilis, has a longitudinal carina on the head. F. bonvouloiri can therefore only be confounded with the second species, F. guineensis, of which only a single example in the Stockholm Museum is known, and it is probable that the two are closely allied, but the details of Bonvouloir's description of F. guineensis do not apply satisfactorily to F. bonvouloiri, and moreover in the latter species the anterior tibiæ are broad. Though it is probable F. bonvoulori will be found elsewhere than in the Sandwich Islands, I believe it to be an undescribed species, and have named it in honour of the author of the monograph of Eucnemides, which is certainly one of the most praiseworthy and useful entomological works of recent years.

Found, I believe, in Oahu; sent by Mr. Blackburn as No. 318.

D. S.

Fornax sculpturatus, n. sp.—Haud latus; postice angustatus; niger, antennis pedibusque rufopiceis; capite crebrius nec fortiter punctato; prothorace transverso, antice parum angustato, confuse nec crebre punctato; elytris fortiter striatis, interstitiis convexis, confuse nec distincte punctatis. Long. $7\frac{1}{2}$ m.m.

This is a very distinct species; its black colour, longer thorax, less narrowed in front, obscure and comparatively sparing punctuation (which is difficult to discern at all on the elytra), and deeply striated elytra, distinguish it from F. bonvouloiri, Sh.; its shape, and the slightly produced hinder angles of the thorax, from F. obtusus; its much shorter antennæ, different shape, &c., from F. longi-

cornis, and the elytra uniformly narrowed behind from F. parallelus. My specimen has scarcely any trace of pubescence, but I think this may be due to its not being in fresh condition. There is an obscure longitudinal carina on the forehead.

A single specimen was taken under the bark of a tree on the Waianae Mountains, Oahu.

T. B.

Fornax parallelus, n. sp.—Angustus, parallelus, pubescens, castaneus; capite crebre fortiter punctato; prothorace leviter transverso antice parum angustato, trans basin elytris vix latiori, angulis posticis parum productis; elytris elongatis, parallelis, striatis, interstitiis subconvexis confuse nec crebre punctatis. Long. 7 m.m.

The extremely parallel form of this insect distinguishes it from all its described Hawaiian allies.

A single specimen was taken in damp moss near the summit of Konahuanui, Oahu.

T. B.

Fornax longicornis, n. sp.—Oblongus, apicem versus fortiter angustatus; obscure pubescens, fuscus, elytris nigrescentibus; antennis corporis dimidio longioribus; capite crebre fortiter punctato; prothorace transverso, antice angustato, trans basin elytris sat latiori, crebre subtilius punctato, angulis posticis fortiter productis; elytris striatis, interstitiis confuse punctatis. Long. $4\frac{1}{2}$ m.m.

The great breadth of the thorax at the base (where it is considerably wider than the elytra), and the very strongly produced hinder angles of the same, the long antennæ, and the very strong narrowing of the elytra towards the apex, together with smallness of size, give this insect a perfectly distinct facies.

A single specimen occurred under bark of a tree on Haleakala, Maui, at an elevation of about 4000 feet; a second (severely mutilated, but probably identical) was taken afterwards within a mile of the same place, and at about the same elevation.

T. B.

Fornax obtusus, n. sp.—Latus; postice obtusus; pubescens; rufopiceus, antennis pedibusque dilutioribus; capite prothoraceque obsolete punctatis; hoc parum transverso, trans basin elytris latiori; elytris striatis, interstitiis crebre subtiliter punctatis. Long. 10 m.m.

Allied to F. bonvouloiri, Sh., but differently shaped, being much wider and less narrowed behind; the thorax is less transverse and more strongly produced backwards; the width across the lobes being considerably greater than the base of the elytra, which latter are scarcely at all contracted in their anterior half, their sides being slightly rounded, and their length decidedly less than three times that of the thorax; the head and thorax are very closely but excessively faintly punctured; the punctuation of the elytra is not so strong as in F. bonvouloiri, Sh.

Two specimens (one of them much mutilated) occurred under bark of trees on Haleakala, Maui, at an elevation of nearly 5000 feet.

T. B.

The last four species of Fornax described above have the following characters in common:—Head, vertical; clypeus, trapeziform; prosternal sutures uniting in front with the margins of the prothorax; margins of the prosternum furnished with antennal furrows; no lamellæ to the tarsi; antennæ simple; joints one, three, and eleven longer than the rest. In F. obtusus and F. longicornis (the two species from Maui) the basal lobes of the thorax are much longer and broader than in the other described Hawaiian species, and the thorax is much more convex longitudinally, and is very decidedly wider than the elytra.

Fam. ELATERIDÆ.

Eopenthes (nov. gen.).

The structure in these insects is very similar to what exists in Elater and Megapenthes, but the head in front is broadly and gently rounded, not at all produced or angulated, and it is separated from the labrum by an extremely small but very abrupt interval; the prosternal sutures are nearly flat in front and not open; the posterior portion of the mesosternal cavity is subperpendicular; the legs and coxæ are formed much as in Elater; the tarsi are quite slender; the angle of the coxal lamina acute; second and third joints of the antennæ short.

D. S.

Eopenthes basalis, n. sp.—Niger, antennarum elytrorumque basibus pedibusque rufo-testaceis, tibiis in medio obscuris, tarsis nigricantibus; capite thoraceque dense fortiter punctatis, tenuiter pubescentibus, hoc angulis posterioribus acute carinatis; elytris profunde striatis, striis punctatis, interstitiis parce punctatis et tenuiter pubescentibus. Long. 11 m.m.

Antennæ not reaching so far back as the hind angles of the thorax, black; the three basal joints reddish yellow; second and third joints short, equal; thorax narrowed from the base to the front in nearly a straight line; the carina of the hind angle much raised above the lateral margin; punctuation dense, so that the surface is quite dull. The basal pale fascia of the wing-cases interrupted at the suture, and only occupying about one-sixth of their length; apices quite acuminate. Prosternal process not curved upwards behind the coxæ, and bearing a very abrupt angle.

Elater humeralis of Karsch, Berl. Ent. Zeit. xxv., p. 5, is no doubt congeric with this insect, and probably closely allied to it.

The unique individual described was sent by Mr. Blackburn as No. 323, found in the mountains near Honolulu.

D. S.

Eopenthes obscurus, n. sp.—Fuscus, prothorace vix subænescente, antennis pedibusque sordide rufo-testaceis, illis basi rufo; capite thoraceque fortiter dense punctatis, tenuiter pubescentibus, hoc angulis posterioribus acute carinatis; elytris basi late vageque rufescente, interstitiis parce punctatis et tenuiter pubescentibus. Long. 10 m.m. (Plate iv., f. 19.)

In this species the sides of the thorax are slightly sinuate, and the prosternal process is bent upwards behind the coxæ, and is furnished with a small angular projection. This character will readily distinguish the insect from E. basalis, even if the difference in colour and other respects prove inconstant. In the only individual I have seen, the second and third joints of the antennæ are not quite so short as in E. basalis, and the apices of the elytra are not acuminate; but these may be sexual characters.

This species, like E. basalis, was sent me by Mr. Blackburn as No. 323. It was found in the mountains near Honolulu, but not in company with E. basalis.

D. S.

Eopenthes debilis, n. sp.—Rufus, capite nigro, antennis pedibus elytrisque testaceis; prothorace haud dense punctato; elytris tenuiter striatis, striis fortiter punctatis, interstitiis parce punctatis et pubescentibus. Long. 7 m.m.

Antennæ reaching as far back as the hind angles of the thorax, rather slender; second and third joints short; the latter of the two a little the longer, and very evidently longer than broad; striæ of elytra fine and very shallow, marked with conspicuous though rather distinct punctures; apices of elytra not acuminate. Prosternal process bent upwards a little behind the coxæ, its prominent angle but small.

I have two female individuals before me, sent as No. 322, and found rarely by sweeping ferns at an elevation of about 2500 feet on the Waianae mountains, Oahu.

D. S.

Eopenthes konæ, n. sp. — Subnitidus; niger, antennis pedibusque piceis, elytris (sutura excepta) castaneis; capite prothoraceque crebre subtilius punctatis tenuiter pubescentibus; hujus angulis posterioribus subtiliter carinatis; elytris fortiter striatis, striis fortiter seriatim, interstitiis confuse, punctatis; his tenuiter pubescentibus. Long. 9. m.m.

Antennæ reaching back by rather more than the length of the apical joint beyond the end of the hind angles of the thorax, pitchy, very little paler at the base; second and third joints short, equal. Thorax much more strongly widened towards the base in the basal third than in the front part, so that the lateral margin appears gently concave; the carina of the hind angle obscure; punctuation dense and fine, the surface being shining. The prosternal process resembles that of E. obscurus, Sh., but is not quite so strongly curved upwards behind the coxæ.

A single specimen was taken flying, near Kona, Hawaii, at an elevation of about 5000 feet.

T. B.

Eopenthes ambiguus, n. sp.—Subnitidus; castaneus, capite nigro, antennis (basi excepta) picescentibus, corporis dimidio longioribus; capite prothoraceque crebre subtilius punctatis, tenuiter pubescentibus; elytris striatis, striis fortiter seriatim, interstitiis vix distincte, punctatis; his tenuiter pubescentibus. Long. 7 m.m.

Antennæ reaching back by the length of the apical three or four joints beyond the end of the hind angles of the thorax; second and third joints short, equal. Thorax not much narrowed to the front, its sides being nearly straight, the carina of the hinder angles scarcely discernible. The prosternal process does not differ much from that of E. konæ.

A single specimen was taken by sweeping at the head of the Palolo Valley, Oahu, at an elevation of about 2000 feet.

T. B.

Eopenthes satelles, n. sp.—Elongatus, subparallelus, subnitidus, niger, antennis pedibus elytrisque testaceis, horum disco fusco; prothorace haud dense punctato; elytris fortiter striatis, striis fortiter interstitiis obscure punctatis; his pubescentibus. Long. 8 m.m.

Antennæ rather slender, just surpassing the end of hind angles of thorax; second and third joints short, equal.

This species is somewhat closely allied to E. debilis, Sh., from which it differs not only in colour and comparative length of second and third joints of antennæ, but also in the following respects:—the elytra are decidedly more elongate and parallel, being therefore much less acuminate behind; and they are much more deeply striated, with the interstices more distinctly punctured, and not so flat. The prosternal process is similar to that of E. debilis, Sh.

The single specimen retained by me, taken in company (*i. e.* at the same stroke of the beating stick), and believed to be conspecific with the specimen described by Dr. Sharp as E. basalis, presents some differences which I have regarded as probably sexual. It is slightly larger, and the antennæ reach back quite to the end of the hind angles of the thorax, having joints four to ten considerably widened and strongly compressed. Unfortunately I failed, before sending the specimen to Dr. Sharp, to notice the characters which he with his well-known acumen has observed in the prosternal process; but if I read his description aright, the specimen which forms the subject of this note agrees in that respect with that described by him as E. basalis; having the prosternal process abruptly and angularly perpendicular behind the front coxæ, and then again produced backwards on a lower plane.

A single specimen was obtained by sweeping ferns near a place called Koele, on Lanai, at an elevation of about 2000 feet.

D. S.

Besides the Elateridæ described above, I possess fragments of a robust-looking insect belonging to the family, of about the same size as Itodacnus gracilis, Sh., having black elytra, on each of which there are a number of small yellow spots, arranged in three irregular transverse fasciæ. These fragments were dug out of the trunk of a species of Acacia, at an elevation of about 2000 feet on the mountains of Oahu.

T. B.

Itodacnus (nov. gen.).

A new genus must be established for an insect allied to Corymbites, but with the lamina of the hind coxa strongly produced over the trochanter so as to form an angle, as in Eopenthes; from this later genus Itodacnus differs, by the front of the head being flat in the middle, so as to be continuous with the labrum, and by the elongate third joint of the antennæ. The facies is that of many species of Athous. The prosternal sutures are scarcely impressed in front, and the prosternal process is without an angle on its lower face; the posterior portion of the mesosternal cavity is a little oblique, but does not differ much in direction from the anterior portion. The tarsi are elongate and slender, and linear, with simple claws; the hind foot is quite as long as the tibia, and its basal joint is elongate, nearly as long as the three following joints together. Corymbites corruscus, Karsch, Berl. Ent. Zeit. xxv. p. 5, pl. i. f. 6, probably belongs to the genus.

D. S.

Itodacnus gracilis, n. sp.—Elongatus, parum convexus, fuscus, supra brunneus, prothorace obscuriore basi pallido, antennis pedibusque testaceis, tenuiter pubescens, sat nitidus; prothorace crebre sat fortiter punctato; elytris haud profunde striatis, striis punctatis; interstitiis crebre punctatis. Long. 12 m.m. (Plate iv., f. 18.)

Antennæ slender, reaching farther back than the hind angles of the thorax; second joint short, but not globular; third twice as long as second; fourth and following joints slender, not serrate internally; terminal joints simple; head and prothorax darker in colour than the elytra, but the base of the thorax is a good deal paler; its sides are not sinuate; the apices of the elytra are not acuminate.

I have a pair of this species before me; the antennæ and legs of the male appear to be more elongate than those of the female, but in other respects the two agree.

This species is found rarely by beating and sweeping on both the mountain ranges of Oahu, at an elevation of about 2000 feet. No. 321 of Mr. Blackburn.

D. S.

Fam. MALACODERMIDÆ.

Helcogaster.

Helcogaster pectinatus, n. sp.—Depressus, niger, nitidus, subglaber, antennis basi testaceo, articulis 5–10 breviter pectinatis. Long. 4 m.m. (Plate iv., f. 20.)

Antennæ longer than the head and thorax, the two or three basal joints yellow, the rest dark; second joint almost globular; third triangular; fourth somewhat produced inwardly; five to ten giving off each inwardly a well-marked, stout process acuminate at its extremity; terminal joint simple; head much narrower behind the prominent eyes; thorax black, smooth, and shining, about as long as broad; hind angles quite rounded, base strongly margined; elytra abbreviate, leaving exposed four of the segments of the hind body, and an emarginate terminal process, obsoletely punctate; exposed segments smooth and shining; black, with a narrow, white, membranous margin at the side.

This species differs from the recorded Australian species of Helcogaster by the pectinate antennæ, but this at present would scarcely justify its being treated as a distinct genus. Mr. Gorham has kindly looked at a specimen, and informs me it is unknown to him.

No. 324. Found in the town of Honolulu.

D. S.

Caccodes (nov. gen.).

This genus is formed for a minute beetle having the appearance of our European Malthodes, but with the elytra very short, dehiscent, scarcely covering one-half of the hind body, and with the mandibles toothed internally near the extremity; in most other respects, so far as I can observe, the characters are but little different from those of Malthodes; the palpi are short, with acuminate extremity, the prosternum extremely short, the antennæ elongate and filiform, the hind wings ample and exserted.

D. S.

Caccodes debilis, n. sp.—Fusco-niger, capite pedibusque testaceis, antennarum basi tibiisque fuscis; antennis sat crassis, corpore longioribus; prothorace fortiter transverso; elytris abbreviatis, fortiter dehiscentibus, obsoletissime punctatis. Long. 2¼ m.m.

Antennæ with the second and third joints rather shorter than the others, the third rather the longer, four to eleven differing little from one another in length; each slightly narrower than its predecessor, so that the acuminate terminal joint is evidently thinner than the fourth joint; head, thorax and elytra bearing an extremely short and fine, not dense, pubescence; eyes large and prominent, head

a little narrowed behind them; thorax quite twice as broad as long, slightly narrower than the elytra, very little narrowed behind; sides, base and front nearly straight, everywhere strongly margined, except that in the middle in front the margin becomes more indistinct; elytra short, but more than twice as long as the thorax, not coadapted at the suture, but becoming divergent from one another just behind the scutellum.

Found in Mr. Blackburn's house at Honolulu; single specimens at wide intervals of time. No. 351.

D. S.

Fam. PTINIDÆ.

Xyletobius.

Xyletobius (?) insignis, n. sp.—Angustus; dense subtilissime tomentosus; capite nigro, ore prothoraceque rufis; elytris piceis testaceo-variegatis subtiliter striatis, striis plus minusve sinuatis; antennis (toto corpore vix brevioribus), palpis, pedibusque rufis; oculis permagnis. Long. 5 m.m.

This insect so closely resembles X. lineatus, Sh., in some respects that I feel a slight misgiving as to whether the characters that seem to distinguish it may not be sexual; in which case, however, it would have to be considered probable that all the remainder of the specimens taken by me in the genus are of the same sex. If this be not the case it would appear doubtful whether the insect can be referred to this genus at all. It differs from X. lineatus as follows:—It is very much larger; the antennæ are very long (scarcely shorter than the whole body), are entirely of a pale red colour and hardly serrated, the joints being very slender and elongate; the eyes are very large and convex, extending the whole length of the head, and being together (viewed from the front) considerably wider than the space between them; the head is obscurely tricarinated longitudinally; the apical dilatation of the tarsi is less defined. I am not able to discover any other characters on which to separate this insect from X. lineatus, Sh.

A single specimen occurred near the crater "Kilauea," of the volcano Mauna Loa, Hawaii, but the exact particulars of its capture have unfortunately been lost. Most probably it was obtained by beating the branches of trees.

T. B.

Xyletobius affinis, n. sp. — Niger, pube subtilissima cinerescente, vestitus; antennis elongatis tenuibus, articulis 3°–6^{m} intus serratis, 4° et 5° brevibus; elytris leviter striatis, parum inæqualibus. Long. 3, antenn. 1$\frac{3}{4}$ m.m.

Antennæ black, as long as the elytra; from the fifth to the eleventh joint each is a little narrower and longer than its predecessor, so that only the third and three or four following joints can be said to be serrate; the third, fourth and

fifth joints are subequal, the former of them is, however, slightly longer than either of the other two, each of which is quite as broad as long. Thorax very short and broad, not produced in the middle in front, slightly broader in front than behind, the sides explanate.

Although I have seen only a single example of this species as well as of X. oculatus, I believe the two are distinct though very similar. X. affinis is rather broader, and has the antennæ a little shorter, and the fourth and fifth joints are shorter instead of longer than the third, and the thorax is less depressed at the sides.

Found at an elevation of about 6000 feet on Mauna Loa, Hawaii.

D. S.

Xyletobius serricornis, n. sp.—Angustus, dense subtilissime tomentosus, rufus, irregulariter infuscatus, pubescentia cinerea variegatus; palpis pedibusque et antennarum articulis 1–3 læte testaceis; antennarum articulis 4–11 nigris his (articulo ultimo excepto) transversis. Long. $2\frac{1}{2}$ m.m.

This species bears a general resemblance to X. marmoratus, Sh., X. lineatus, Sh., and X. insignis, mihi, but can easily be distinguished from them all by the shortness of its antennæ, which are less than half as long as the body, and of which joints four to ten are decidedly transverse and rather strongly serrated internally.

A single specimen was obtained by beating dead branches of trees, at an elevation of about 2000 feet, on a mountain on Lanai.

I have a single specimen of Xyletobius, from Hawaii, which I refer to X. oculatus, although it differs from the type in having the legs reddish and the base of the antennæ testaceous.

T. B.

Xyletobius lineatus, n. sp.—Niger, pube variegata vestitus, antennarum basi pedibusque testaceis, elytris nigro-sanguineis; antennis tenuibus, parum elongatis, intus leviter serratis. Long. $2\frac{1}{4}$ m.m.

Antennæ reaching but little farther back than the base of the thorax, slender; of joints five to ten each is slightly longer than its predecessor, but no one of them is elongate. Thorax very convex transversely in front, and with the front angles deflexed and hidden, clothed irregularly with a pale flavescent pubescence, which is absent altogether from the middle. Elytra finely striated, of a black colour tinged with red, the red being more distinct in places, so that they appear a little variegate, and this appearance of variegation is increased by some lines and patches of pale pubescence. Legs, clear yellow.

This distinct species may be placed in front of X. marmoratus as the first species of the genus, its antennæ showing a less remarkable development than do the others. It was found by beating dead branches of trees, at an elevation of about 6000 feet, on Mauna Loa, Hawaii.

D. S.

CATORAMA.

Catorama pusilla, n. sp.—Brevis, rufo-ferruginea, antennis tibiisque pallidioribus; minus dense punctata et pubescens. Long. 2 m.m.

This obscure insect is readily distinguished from C. mexicana by its smaller size and brighter colour, and it also appears to have a less dense pubescence; the antennæ, with the exception of the basal joint, are quite pale yellow; the thorax is short and very transverse, without visible punctuation; the elytra are without striæ, and bear an almost invisible punctuation, and behind the base there are some fine but larger punctures that scarcely extend beyond the middle.

Mr. Blackburn found two individuals in the island of Maui.

D. S.

MIROSTERNUS.

Mirosternus acutus, n. sp.—Piceus, antennis pedibusque rufescentibus; elytris ad basin apicemque crebre subtiliter punctatis; parte intermedia sparsim minus subtiliter punctata; metasterno fortiter carinato. Long. 3 m.m.

This species is allied to M. muticus, Sh., but has the metasternum differently sculptured, the hinder portion being profoundly channeled, and the front portion bearing a very strongly and sharply elevated carina. In the male (the only sex known to me) the densely punctured apical portion of the elytra appears to extend somewhat further forward than in M. muticus, and the apical three joints of the antennæ (especially the last) are wider than in the other known species of the genus.

A single specimen was obtained by beating dead branches of trees, at an elevation of about 2000 feet, on Kauai.

T. B.

Fam. BOSTRICHIDÆ.

BOSTRICHUS.

Bostrichus migrator, n. sp.—Cylindricus, niger, sat nitidus, antennis rufis, harum clavæ articulis suboblongis haud intus serratis; prothorace anterius muricato, posterius dense sculpturato, margine anteriore in medio utrinque breviter producto; elytris dense sat fortiter punctatis. Long. 9½ m.m.

Var. major, elytris versus apicem utrinque biangulariter prominulis; an sexus alter? Long. 14 m.m.

Antennæ with the three terminal joints forming a lax elongate club, the first of them a little longer than broad, the two following nearly similar to it, and not at all triangular in shape; thorax a little produced in the middle in front; the produced portion a little emarginate, each side of the emargination terminating as a small hook, the tubercle forming the hook being the most anterior of a lateral series of five similar murications; there are besides these lateral series numerous other less sharply elevated murications; the posterior portion of the thorax bears a peculiar scale-like sculpture; the punctuation of the elytra is not very coarse, and is irregular, though of a somewhat serial character.

This species inhabits Nicaragua, as well as the Sandwich Islands; it is closely allied to Amphicerus fortis, Leconte, but it is comparatively narrower, and the punctures on the elytra are finer, and the prothoracic prolongations are very much shorter than in the North American insect. Although the insect belongs to the genus Amphicerus Leconte, yet it also belongs to Bostrichus, as now understood; Leconte, when dividing Bostrichus, having fallen into the error of giving the name of Amphicerus to the insects to which our well-known European Bostrichus capucinus belongs, whereas he should have retained the name Bostrichus for that division, and have conferred a new name on the cornuted forms to which he assigned the old Geoffroyan name of Bostrichus. In consequence of this error of Leconte's, the Munich Catalogue presents us with a complete confusion about the two genera.

D. S.

Fam. CIOIDÆ.

Cis.

Cis bimaculatus, n. sp.—Niger, antennarum basi pedibus elytrisque testaceis, his in medio nigro-bimaculatis, glaber, nitidus, elytris basi parce, fortiter punctato, prothorace crebrius et subtilius punctato. Long. 3 m.m.

Antennæ small, with slender club, the two basal joints yellow, the rest dark; head small, only half as broad as the thorax; thorax curved at the sides, and rather narrowed in front, rather broader than long, black, but with a small paler mark in the middle of the base and at the front margin; very distinctly punctured; elytra pale, with a dark spot on the middle of each; the basal portion coarsely but sparingly punctate, the apical half impunctate.

Found very rarely, according to Mr. Blackburn, on the higher mountains of Maui and Hawaii. No. 271.

D. S.

Cis nigrofasciatus, n. sp.—Oblongus, sat elongatus, fortiter convexus; nitidus crebrius subtiliter punctatus; subtus nigricans, supra variegatus, antennis piceis basi testaceo, capite prothorace pedibusque flavo-testaceis, elytris fusco-testaceis; fascia nigra angulata transversa in medio notatis. Long. 3 m.m.

This species is somewhat allied to C. bimaculatus, Sh., but differs from it by the closer and finer punctuation of its elytra, and the much more strongly rounded sides of the thorax, of which the basal margin is very indistinct.

A single specimen was procured by beating dead wood, at an elevation of about 2000 feet, on Lanai.

T. B.

Cis longipennis, n. sp.—Sub-oblongus; minime convexus; fortiter angustatus; nitidus; sublævigatus; fusco-brunneus, antennis pedibusque flavo-testaceis. Long. $1\frac{4}{5}$ m.m., lat. $\frac{3}{5}$ m.m.

This species is closely allied to C. læticulus, Sh., but differs from it not only by its colour, but by its distinctly less convex, narrower, and more elongate form, thorax less rounded at the sides, and more narrowed behind, and elytra more distinctly punctured.

A single specimen was found in dry wood on the mountains of Kauai.

D. S.

Cis apicalis (? = C. setarius var.), n. sp.—Parum elongatus, nitidus, niger, antennis pedibus elytrorumque apice testaceis, antennarum clava fusca; prothorace parce punctato, in margine anteriore testaceo-signato, elytris fere lævigatis. Long. $1\frac{7}{8}$ m.m.

Thorax quite sparingly punctate, a little rounded at the sides, and with the hind angles indistinct and obtuse. Elytra black, with a large testaceous patch at the apex; at the base with a few punctures; elsewhere impunctate.

The unique individual described is in bad condition, but I can detect no trace of any elongate setæ on the elytra.

Hawaii.

D. S.

Cis setarius, n. sp.—Parum elongatus, niger, nitidus, prothorace elytrisque castaneis, his apicem versus dilutioribus, antennarum basi pedibusque testaceis; prothorace elytrisque parce, minus argute punctatis, his setis erectis, elongatis subtilissimis parce adspersis. Long. $1\frac{7}{8}$ m.m.

Antennæ slender; thorax rather broader than long, not much rounded at the sides, and with the hind angles distinct though rather obtuse, sparingly and rather obsoletely, but not finely punctured; elytra on the basal portion, sparingly and obsoletely punctate, on the apical portion almost impunctate, bearing a very few excessively fine elongate setæ.

This, and C. apicalis and C. concolor, were sent me by Mr. Blackburn as No. 342, and were found in different localities (not specified) in Hawaii. Though I have seen only one individual of each, they appear to me to be distinct species; and I give the description of C. apicalis, though Mr. Blackburn may prove to be right in considering it a variety of C. setarius.

D. S.

Cis concolor, n. sp.—Parum elongatus, angustulus, nitidus, niger, antennis pedibusque testaceis, femoribus nigris; elytris sublævigatis, setis elongatis, tenuissimis parcissime adspersis. Long. $1\frac{1}{2}$ m.m.

Antennæ yellow, slightly obscured towards the apex; thorax very sparingly punctate; elytra almost impunctate, with a few obscure inequalities on the basal portion. The setæ towards the sides are so few and fine, that they are not very easily observed. Although closely allied to C. setarius and C. apicalis, the specimen described is smaller, narrower, and less convex, and has the prosternum undoubtedly more elongate in front of the coxæ.

Hawaii.

D. S.

[I see Dr. Sharp regards the three specimens of Cis, sent to him by me under the number 342 (*vide supra*), as representing three distinct species. As regards C. concolor, I am disposed to accept the correction, and think that I had not attached sufficient importance to the difference in build, which certainly seems to distinguish that insect; but I am unable to acquiesce in the separation of the other two. I have specimens, coloured and punctured as C. apicalis is said to be, in which the elongate setæ are very well defined, and when the distinction of villosity is removed I see no other well-marked difference to separate C. setarius from it.

There exist in the Hawaiian islands a number of types of Cis closely allied to C. bicolor, Sh., and which I cannot satisfactorily distinguish from that insect. C. bicolor, Sh., therefore, I regard as a widely distributed and variable species, from which I do not see my way to separate C. tabidus, Sh. The following, therefore, would appear to me a desirable appendix to the description of C. bicolor, Sh., Trans. Ent. Soc., 1879, Part 1. p. 93 :—

"This insect is extremely variable, and occurs throughout the Hawaiian Archipelago. Its size varies from $1\frac{1}{2}$ m.m., to $2\frac{1}{3}$ m.m. The specimens from Kauai (C. tabidus, Sh.) are a little shorter and broader than the type, and more obscurely coloured and punctured. Oahu specimens are usually of the form described, but vary in the direction of the punctuation, becoming faint, especially in the front of the thorax, and the markings being more or less obliterated or intensified—the extremes of marking, so far as known, being testaceous or fuscous, with obscure indications of some of the usual markings, and thorax and elytra almost entirely suffused with black.

"Specimens from Maui are slightly larger than from Oahu, and have, in well-marked specimens, the dark markings æneous, instead of black, and the punctuation tending to greater intensity.

"Specimens from Hawaii closely resemble those from Maui, but are a little smaller and more obscure."

T. B.]

Cis chloroticus, n. sp.—Parum elongatus, convexus, nitidus, glaber, pallide fuscus, antennarum basi pedibusque testaceis, elytris prothoraceque anterius pallidulis. Long. 1⅛ m.m.

This insect appears to be closely allied to C. apicalis, though differing from it remarkably in colour; the upper surface has no trace of clothing, and is very shining; the thoracic punctuation is distant, and is rather coarse, though indefinite; the elytra have very little sculpture; it consists of some distant, rather coarse but indefinite, punctures on the basal portion.

I have seen only one specimen, in very bad preservation. Mr. Blackburn found it on Haleakala, in the island of Maui, at an elevation of 4000 or 5000 feet, and sent it to me as No. 424.

D. S.

Cis calidus, n. sp.—Angustulus, nitidus, pube tenuissima, elongata sat dense vestitus, castanea, capite, thorace antennisque versus apicem fuscis, thorace in margine anteriore pallido; parce punctatus. Long. 1½ m.m.

This little insect will be readily recognized by the elongate, very fine, upright pubescence of its upper surface; if this pubescence were removed the surface would be seen to be quite shining; the punctuation of the thorax is rather obsolete and not coarse or close; that on the elytra is also indefinite, and is confined to the basal portion.

Mr. Blackburn has found this species in decaying wood on two occasions, in each case a single specimen, in the mountains of Oahu, but in localities twenty miles apart. No. 475.

D. S.

Cis insularis, n. sp.—Elongatus, parallelus, subglaber, nitidus, fusco-testaceus, antennarum basi pedibusque rufis, elytris pallidis; antennis apicem versus fuscis; prothorace dense fortiterque punctato; elytris crebrius inequaliter punctatis. Long. 2½ m.m.

Antennæ with rather elongate club; fuscous with the base pale; thorax elongate, quite as long as broad, a little curved at the sides and somewhat narrowed behind, coarsely and very densely punctate; lateral margin distinct, but basal margin very indistinct; elytra pale yellow, closely and rather coarsely punctate, and with the surface a little rugose; legs stout.

Oahu.

D. S.

Cis roridus, n. sp.—Parallelus, angustulus, sat elongatus, parum nitidus crebrius conspicueque setulosus, dense fortiter punctatus, fuscus, antennarum basi pedibusque rufis, prothorace anterius testaceo, elytris maculis plurimis testaceis. Long. $1\frac{3}{8}$ m.m.

Antennæ dark, with the two basal joints reddish; thorax about as broad as long, very densely punctate, finely and indistinctly margined; elytra coarsely and closely punctate, marked with conspicuous pale yellow spots, one on each side of the scutellum, and one more elongate between this and the shoulder, and nearly attaining a spot near the suture in front of the middle; beyond the middle an oblique transverse mark.

This species is another very distinct one; the peculiar clothing of the upper surface (which consists of a pale, rather rough setulosity, somewhat like what is frequent in the genus, but more elongate and finer) is of itself sufficient for its identification.

D. S.

Cis attenuatus, n. sp.—Oblongus, angustus, parum convexus, supra testaceus, elytris in medio nigro-signatis, opacus, dense punctatus, brevissime hispidulus. Long. $1\frac{1}{2}$ m.m.

This species, by its very dense punctuation and other characters, is closely allied to C. signatus, of which I formerly treated it as a variety (Trans. Ent. Soc., 1879, p. 93); the thorax is, however, longer and less transverse, and its punctuation rather less dense; the general form is a little narrower and more cylindrical, and the eyes are a little smaller; the antennæ are entirely yellow, and the thorax is without the large black mark of C. signatus. I think, therefore, this will prove a distinct species, even should the colour distinctions, as is probable, prove inconstant.

Found on the mountains of Kauai, and formerly thought to be a variety of C. signatus.

D. S.

Cis ephistemoides, n. sp.—Ovalis, valde convexus, nitidus, glaber, impunctatus, subtus testaceus, supra nigricans vel piceus, antennis pedibusque testaceis, antennarum clava fusca. Long. 1 to $1\frac{1}{2}$ m.m.

This insect differs so much in form and appearance from the other species of Cis, that I supposed it would prove to be a distinct genus, and allied probably to Atomaria or Ephistemus, of which it has much the facies, but on examination I am unable to find any good characters to distinguish it from Cis. The rather slender antennæ are of the form usual in the genus with three-jointed club. The thorax is extremely convex transversely and much longer in the middle than at

the sides, and is very closely applied to the elytra, the lateral margin is very fine, and the basal one obliterated. The elytra are even more convex than the thorax, and acuminate behind.

The species apparently varies in size, and in the depth of colour, and is, I believe, one of the commoner beetles of the archipelago.

D. S.

Cis vagepunctatus, n. sp.—Ovalis; valde convexus; nitidus; parcius fortiter punctatus; nigricans, pedibus et antennarum basi rufis; antennis brevibus, clava crassiuscula. Long. $1\frac{1}{2}$ m.m.

This insect differs from C. ephistemoides, Sh., to which it is closely allied, in having shorter antennæ, which are more strongly clubbed; and in being strongly, though not at all closely, punctured throughout.

A single specimen was taken out of damp, rotten wood, on one of the mountains near Honolulu.

T. B.

Fam. TENEBRIONIDÆ.

Platydema.

Platydema obscurum, n. sp.—Oblongo-ovale, parum convexum, opacum, subtiliter punctatum, nigrum, antennis pedibusque testaceis, elytris testaceo-signatis. Long. $2\frac{1}{2}$ m.m.

Antennæ short and stout, the third joint longer than any of the others, the seventh rather broader than the sixth, which itself is slightly broader than the fifth; seven to eleven subequal in length, each broader than long. Thorax very finely and rather closely punctured, dull, the base very distinctly sinuate on each side near the scutellum. Elytra with distinct and regular series of fine punctures, interstices impunctate, they bear elongate narrow yellow marks, which, however, are very variable, so that sometimes the elytra appear black with some small yellow marks, sometimes yellow with irregular fasciæ of black marks. The under-surface likewise varies in depth of colour, being sometimes quite black, while in other cases the prosternum is piceous; the femora are sometimes yellow, sometimes dark.

This species has allies widely distributed; and in the British Museum there is, without a name, a very closely allied species from Celebes.

D. S.

Sciophagus (new generic name).

The insect for which I propose this generic name has the appearance of a small, shining Alphitobius, but its tarsi are densely pubescent beneath. The mentum is extremely small, reduced to a small carinate shield having only the size of the last joint of the maxillary palpus, and leaving all the parts of the mouth exposed; the maxillary palpi are short and thick, their terminal joint broader, subsecuriform. The antennæ are short and stout, with the basal joint concealed by the clypeus, and are incrassate from the middle to the extremity: eyes rather large, coarsely facetted; clypeus broad in front, and slightly emarginate, leaving exposed the broad labrum. Prosternum furnished with a well-marked, narrow, horizontal process, projecting into the impressed mesosternum. Metasternum of moderate length; tibiæ rather slender, not denticulate externally; spurs small; tarsi rather slender, clothed beneath with dense fine pubescence, penultimate joint simple; basal joint of the posterior elongate, about equal in length to the terminal joint.

The clothing of the tarsi renders the position of the genus somewhat dubious, otherwise it appears allied to Alphitobius and other of the genera placed by Lacordaire in the Ulomides. The insect for which it is proposed is the Heterophaga pandanicola, Esch. (Plate v., f. 27). It occurs in the Radack chain, and in New Zealand (Coll. Murray) as well as in the Sandwich Islands. The name appears to be omitted from the Munich Catalogue of Coleoptera. Mr. C. O. Waterhouse informs me that, in the British Museum collection, this insect is also extant under the name Pachycerus domesticus, Mont., from New Caledonia; but this does not affect the nomenclature, as P. domesticus is subsequent in date to H. pandanicola, and the name Pachycerus is in prior use for another genus of Coleoptera. In the Munich Catalogue Pachycerus domesticus is placed in the genus Alphitobius.

D. S.

Labetis.

Labetis tibialis, Wat.—As the description of Labetis tibialis, Waterh. (*Vide* E. M. M., vol. xv. p. 267), seems to be founded on a female—and I possess both sexes—it may be well for me to mention here the characters of the male. They are as follows:—The central portion of the apical ventral segment is occupied by a profound impression which is nearly as wide as long, and extends from near the base of the segment to its apex; there is a lamella underneath all the joints of the anterior, underneath the second, third, and fourth joints of the intermediate, and underneath the penultimate joint of the posterior tarsi; the antennæ are slender and rather more than three-fourths the length of the body; and the anterior tibiæ are wider than in the female, and have the external edge considerably more strongly produced at the apex. The length of the male specimen in my collection is 15 m.m., of the female $9\frac{1}{2}$ m.m.

I obtained my pair of this insect by beating branches of trees on the mountains near Honolulu.

T. B.

Cistela.

Cistela crassicornis, n. sp.—Ovalis, angustulus, fusco-niger, antennis pedibusque testaceis, illis apicem versus obscuris, elytris bruneo-obscuris; capite thoraceque dentissime punctatis, opacis, elytris parcius punctatis, subnitidis. Long. 6 m.m (Plate iv., f. 25).

Antennæ 3 m.m. long, rather stout, the four or five terminal joints a little serrate internally; head narrow, coarsely and extremely densely punctate; thorax a good deal narrowed in front, and rounded at the front angles; the hind angles nearly rectangular; the basal margin fine but distinct; lateral margin scarcely to be detected in front, the surface coarsely and extremely densely punctate, finely and scantily pubescent; elytra of a dark, sordid brown colour, rather shining, moderately closely and not coarsely punctate, the punctures scarcely to be distinguished as impressions, with a depression along the suture, and with a very feeble appearance of being striate, owing to an arrangement of some of the punctures in a linear manner.

A pair of this species was taken from trees in the Palolo valley, Oahu. The male has the second, third, and fourth joints of the front tarsi, especially the two latter, considerably dilated. Mr. Blackburn states that the antennæ of the female are somewhat shorter, and paler in colour, than those of the male, and have the internal serration of the terminal four or five joints less evident.

D. S.

Anthicus.

Anthicus mundulus, n. sp.—Gracilis, angustulus, parce pubescens, nitidus, ferrugineus, elytris plaga laterali variabili abdomineque fuscis; prothorace basi fortiter punctato, anterius fere impunctato; elytris parce punctatis, tenuiterque pubescentibus. Long. 3 m.m.

Antennæ reddish, rather elongate, slightly thickened at the extremity; head oval, narrow, the vertex greatly curved, and greatly elevated above the slender neck, sparingly and obsoletely punctate; thorax slender, greatly constricted behind, at the base coarsely and closely punctate, in front, almost impunctate, sparingly and finely pubescent; elytra elongate and narrow, rather curved at the sides, sparingly punctate and pubescent, with a large patch of darker colour at the side of each; legs yellow.

This species varies somewhat in colour, the dark marks of the elytra being sometimes more intense and extensive, and in such cases the head and thorax become deeply tinged with the dark colour; the punctuation of the elytra is sometimes coarser and more definite.

North American specimens, scarcely differing from this species, are extant in the British Museum, with the MS. name attached, A. salinus, Schaum; but this name is in use for another species.

D. S.

Ananca.

Ananca collaris, n. sp.—Rufo-testacea, capite supra elytrisque nigro-plumbeis, antennis pectore abdomineque fuscis; elytris opacis, minus argute sculpturatis, absque lineis elevatis. Long. 8–11 m.m.

Maxillary palpi, with their terminal joint slightly dilated internally; antennæ elongate, but not so long as the insect; thorax bright yellow, narrowed behind, and a good deal rounded at the sides in front, rather closely but indistinctly punctured, its surface slightly uneven; elytra of a dull leaden black, their surface sculptured rather closely, the sculpture not consisting of impressed punctures, without raised lines, though on careful inspection traces may be seen of the rudiments of two such lines, that near the suture being the more distinct.

Mr. Blackburn has sent me, as he believes, the sexes of this species, but they do not differ except that the antennæ are slightly longer in one. The colour of the metasternum and tarsi is a little variable, these parts being sometimes fuscous, sometimes yellow.

Single individuals of this species are occasionally found about Honolulu.

D. S.

Fam. AGLYCYDERIDÆ.

Proterhinus.

Proterhinus linearis, n. sp.—Angustus; subparallelus; crasse confuse punctatus; nigro-fuscus, antennarum basi, pedibus, prothorace et elytrorum basi rufis; prothorace elongato, lateribus leviter rotundatis; elytris subparallelis, humeris obscuris. Long. $1\frac{3}{4}$ m.m.; lat. $\frac{2}{3}$ m.m.

This very pretty little insect resembles P. longulus, Sh., in shape, but is even narrower and more parallel. It is quite distinct from everything else known to me. The basal two joints of the antennæ are rather large, the second especially being longer than is usual in the genus, and the remaining joints are stout. My specimen is somewhat abraded, but I can discover some traces of short setæ on the elytra.

A single female example occurred on Kauai, but the exact particulars of the capture have been lost.

T. B.

Proterhinus scutatus, n. sp.—Angustulus; rufescens, marginibus lateralibus plus minusve nigricantibus; obscure aureopilosus; setis erectis sparsim nec conspicue vestitus; fortiter punctatus; prothorace fortius rotundato; elytrorum parte anteriore angustata; humeris fortiter productis. Long. $2\frac{1}{3}$–$3\frac{3}{4}$ m.m.

This insect is allied to P. simplex, from which it differs in shape, the elytra being more elongate, much more narrowed towards the base than in P. simplex, and having the humeral angles more strongly produced, and the thorax being more regularly rounded laterally. It differs, moreover, from the insect on which the original description of P. simplex was founded in having unicolorous antennæ and tarsi, although in this respect it agrees with certain forms occurring on Oahu (which must at present be assigned with doubt to P. simplex as vars.). As in P. simplex, the basal joint of the antennæ is smaller in the male than in the female.

This species occurs in mountain forests on Kauai.

T. B.

Proterhinus similis, n. sp.—Sat elongatus; rufescens, plus minusve aureo-tinctus, elytris plus minusve nigro-maculatis; antennis sat crassis, piceis, concoloribus; prothorace leviter transverso, lateribus fortiter regulariterque rotundatis, antice posticeque fortius angustato nec constricto; elytris setis erectis sparsius vestitis; humeris parum prominulis. Long. $2\frac{3}{4}$–$3\frac{1}{2}$ m.m.

This is another ally of P. simplex, Sh. Its most conspicuous distinctive characters are that the lobes of the fourth joints of the tarsi are much smaller than in P. simplex, that the antennæ are of more uniform thickness (the intermediate joints being stouter in proportion to the basal and apical ones), and that there is no noticeable difference between the sexes in respect of the size of the first joint of the antennæ. The greater length of the second joint of the antennæ, together with the feeble development of the tarsal lobes, distinguishes the insect from P. tarsalis.

This species was obtained by beating branches of trees, at an elevation of about 4000 feet, on Mauna Loa, Hawaii, where it is not rare.

T. B.

Proterhinus laticollis, n. sp.—Sat brevis; rufescens, marginibus lateralibus plus minusve nigricantibus; obscure aureo-pilosus; setis erectis sparsim nec conspicue vestitus; obscure punctatus; prothorace fortiter transverso, elytris nullo modo angustiore, lateribus fortiter rotundatis; humeris parum distinctis. Long. $2\frac{1}{2}$ m.m.

The extremely transverse thorax, which is wider instead of narrower than the elytra, renders this species (which belongs to the P. simplex group) very distinct. The colour of its whole surface, including legs and antennæ, is almost uniform, the only marking being some infuscation along the external margins of the elytra; the basal joint of the antennæ is scarcely longer than the second; the eyes are small and little prominent.

A single male specimen was obtained by beating branches of trees on the Waianae Mountains, Oahu.

T. B.

Proterhinus tarsalis, n. sp.—Sat elongatus; crebre punctatus; nigricans, albido-maculatus, tarsis rufis; prothorace transverso, rotundato; elytris setis longis vestitis, humeris vix acutis; antennarum articulo secundo vix elongato. Long. $2\frac{3}{4}$–$3\frac{1}{4}$ m.m.

The colouring of this species appears to be constant, and differs from that of every other known to me in the genus. The insect is entirely of a smoky black colour, except that there are a few golden brown scales on the thorax, and some (usually about eight) ill-defined round spots of a whitish colour, inclining to golden brown, on each of the elytra, and that the tarsi are clear red. It is allied to P. simplex, Sh., from which and other allied species it differs (apart from size, colour, and other respects) in having the second joint of the antennæ scarcely longer than wide, and the first joint scarcely shorter in the ♂ than in the ♀. From C. debilis, Sh., it differs in having larger eyes, more pronounced club of antennæ, &c., as well as in size and colour.

A short series of this insect was obtained by beating branches of trees on Mauna Loa, Hawaii, at an elevation of about 6000 feet.

T. B.

Proterhinus robustus, n. sp.—Rufo-brunneus; albido-squamulatus; setis erectis minus sparsim vestitus; prothorace vix transverso, antice posticeque parum angustato nec constricto, lateribus leviter rotundatis; angulis humeralibus haud prominulis; antennarum articulo primo quam secundo duplo majore, hujus longitudine latitudinem distincte superante. Long. $3\frac{3}{4}$ m.m.

This species belongs, I think, to the P. simplex group; it is, however, a stouter-looking insect than the others. The elytra are broadest at the base, and not at all parallel, with indistinct humeral angles, and gently rounded sides. The elongation of the basal joint of the antennæ (in the female at least) is a conspicuous character.

A single specimen (female) was taken from the bark of a tree on the Waianae Mountains, Oahu.

T. B.

Proterhinus ineptus, n. sp.—Parum elongatus, nigricans, antennis tibiis tarsisque rufis, elytris ferrugineis, vage nigro-signatis; supra parum dense vestitus, setulisque erectis parum conspicuis; prothorace lateribus rotundatis, anterius parum constricto, dorso indistincte tri-impresso; elytris inæqualibus, humeris acutis. Long. $2\frac{1}{2}$ m.m.

Closely allied to P. vestitus, but with the thorax more globose and less impressed, with the shoulders of the elytra more acute, and the setæ shorter. Also very similar to P. integer, but with smaller eyes, and shorter antennæ, and less

elongate thorax, and without the large black mark on the side of the elytra. The differences between the sexes are almost the same as in P. vestitus.

A pair of this species, found on the island of Lanai, has been received as No. 478.

D. S.

Proterhinus integer, n. sp.—Sat elongatus, nigricans, antennis, tibiis tarsis elytrisque rufis, his nigro-signatis; densius parum maculatim vestitus, setulis erectis sat conspicuis; prothorace lateribus rotundatis, anterius haud abrupte constricto, minus evidenter tri-impresso; elytris haud inæqualibus, humeris acutis. Long. 3 m.m.

This species appears about equally allied to P. vestitus and to P. sternalis; it is distinguished from the former by its more elongate form, more abrupt antennal club, considerably larger eyes, less abruptly constricted and less impressed thorax, more acute humeral angles, and rather larger tarsal lobes. It agrees with P. sternalis in the structure of the antennæ, and in the larger eyes, and also in that, on very careful examination, there may be detected traces of the curved elevation extending from the shoulder of the elytra, but it is of much less abbreviate form, has much smaller tarsal lobes, and more rounded sides to the thorax; the humeral angles of the elytra are much prolonged, as in P. sternalis.

The description is made from two males agreeing closely, except for a slight difference in size. Mr. Blackburn has sent as the female (or rather under the same number, a female) an insect differing in many particulars; the form is shorter and broader, the eyes smaller, the white ashy clothing is replaced by a scanty yellower setosity, and the erect setæ are shorter, the punctuation of the elytra is conspicuous, and they have no trace of the large lateral black mark. I think it more probably the female of another species.

Found on the mountains of Lanai.

D. S.

Proterhinus detritus, n. sp.—Elongatus, sub-parallelus, brevissime setulosus, parum squamosus, ferrugineo-obscurus, elytris nigro-maculatis; prothorace lateribus parum rotundatis, subrectis, anterius abrupte constricto, parum argute impresso, rugoso-punctato; elytris crebre fortiter punctatis. Long. $3\frac{1}{4}$ m.m.

This appears to be a very distinct species, although I have only a single male individual to base this opinion on. The antennæ are entirely red, rather elongate and slender, with the two basal joints much incrassate, the second rather longer than broad, the third quite slender and elongate, three times as long as broad, the club very little marked, slightly longer (joints nine to eleven) than joints three to five. Rostrum short and broad, covered with depressed scale-like hairs quite to the front, head but little dilated over the insertion of the antennæ, eyes rather

large, moderately convex. Thorax just as long as broad, the lateral angle formed near the front by the anterior constriction, very abrupt, the surface but little impressed, the anterior impression forming a vague channel, deepest in front, the lateral ones slightly marked, without squamosity, but with depressed setæ, which somewhat obscure its rugose sculpture. Elytra elongate, but little dilated behind, humeral angles distinctly prolonged, the surface coarsely punctate, and bearing short setæ, which do not form patches; erect setæ scarcely evident; legs red.

Perhaps more allied to P. vestitus than to any other species, but readily distinguished by the numerous differences in all points.

Found on the mountains of Lanai.

D. S.

Proterhinus longicornis, n. sp.—Elongatus, angustulus, irregulariter squamosus, setulisque erectis conspicuis ornatus, nigricans, tarsis rufis, antennis versus basin rufescentibus, elytris rufo-variegatis; oculis sat magnis, a thorace remotis; hoc elongato, lateribus rotundatis, anterius minus abrupte constricto, parum distincte tri-impresso; elytrorum humeris acutis. Long. $2\frac{3}{4}$–3 m.m.

Male; antennæ elongate three-fourths of the length of the body; second joint rather elongate, more than half as long as the third; eighth joint remarkably elongate; club very slender and elongate. Head elongate, much dilated above the insertion of the antennæ; eyes rather large, and very distant from the front margin of the thorax: this latter very coarsely and densely punctate, its impressions indistinct. Tarsal lobes not large. The female differs, by its shorter antennæ, the eighth joint of which is not elongate, but the club is comparatively abrupt; the eyes are rather smaller but more prominent and less remote from the thorax. The species is allied to P. collaris by the peculiar form of the male head and antennæ; but it is abundantly distinct by its narrower more elongate form, longer antennæ, and less globular thorax, and the squamosity of the surface is not so condensed into patches.

This is also from the mountains of Lanai.

D. S.

Proterhinus insignis, n. sp.—Major, piceus, supra fulvo-ferrugineus, fere equaliter tomentosus, setulisque erectis conspicue vestitus, elytris parum maculatis, antennis pedibusque rufis; antennis elongatis, gracilibus, articulo basali maxime elongato; oculis perprominulis; prothorace parum distincte trifoveolato, elytrisque parum inæqualibus. Long. ♂ $4\frac{1}{2}$, ♀ cum rost. 4 m.m. (Plate v., f. f. 44, 45).

One of the most remarkable species, with excessive sexual disparity, but with the great elongation of the basal joint of the antennæ common to both sexes, and in both sexes the antennæ are much clothed with erect hair, which is longer and denser on the inner face of the joints in the male. In this latter sex the antennæ

are inserted far in front of the eyes, and in front of their insertion the head is narrowed so as to appear acuminate. In the male the basal joint of the antennæ is not only elongate but is greatly incrassate, the second joint is short and thick, subtriangular, about as long as broad; in the female these two joints are more slender, though the basal one is still stout as well as elongate, the club is very slightly marked in the male, but is more distinct in the female. The anterior thoracic impression is very vague, the lateral ones, though smaller, are more definite. The elytra are nearly parallel-sided, are coarsely punctate, and have the humeral angles prominent, and a slight basal elevation on each side of the scutellum, and in the male there is in addition an obscure longitudinal elevation on the side of each elytron.

In the male of this remarkable species the head is provided with true scrobes, visible from beneath as broad, deep depressions extending as far back as the under-surface of the eye.

This was also found in Lanai, at an elevation of about 2000 feet, near a place called Koele, and was beaten from dead branches of trees.

D. S.

SYNOPSIS OF THE HAWAIIAN PROTERHINI.

1.	Species having the surface of the elytra uneven,*	2.
	,, ,, ,, ,, ,, ,, evenly convex, or nearly so, . .	10.
2.	The unevenness of the elytra caused (at least partly) by the presence of longitudinal ridges, ...	3.
	The unevenness of the elytra caused entirely by a transverse basal depression,	basalis.
3.	The longitudinal ridges gently sloped off behind, ...	4.
	,, ,, ,, abruptly vertical behind, ...	Lecontei.
4.	First joint of antennæ shorter than second and third together, . . .	5.
	,, ,, ,, not shorter than second and third together, . .	insignis.
5.	Elytra without any trace of transverse unevenness, ...	6.
	,, more or less uneven, transversely as well as longitudinally, . .	9.
6.	The dorsal part of the elytra not conspicuously flattened, ...	7.
	The dorsal part of the elytra strongly flattened, and margined laterally by an elevated ridge, ...	paradoxus.
7.	The second joint of antennæ very much shorter than the third, . . .	8.
	,, ,, ,, ,, scarcely shorter than the third, ...	Blackburni.

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* In P. integer, Sh., and P. dispar, Sh., the unevenness of the surface of the elytra is not nearly so well defined as in some other species of the category.

8. Lobes of third joint of tarsi very large; oblique ridges on elytra well-defined and strong; a species of rather abbreviated form, ... sternalis.
   Lobes of third joint of tarsi only moderate; form rather elongate; oblique ridges almost obsolete, ... integer.

9. The transverse as well as longitudinal ridges almost obsolete; antennæ slender, with a well-defined club of three joints, ... dispar.
   The transverse as well as longitudinal ridges well-defined; antennæ stout, only slightly thickened at apex, ... validus.

10. The anterior portion of the thorax abruptly narrowed, so that the lateral outline does not form a continuous curve, ... 11.
    Thorax rounded regularly (or nearly so) on the sides, ... 12.

11. Elytra considerably narrowed towards the base in their anterior third; legs and antennæ black, ... nigricans.
    Elytra but little (though quite evidently) narrowed towards the base in their anterior third; legs and antennæ testaceous, ... vestitus.
    Elytra parallel and somewhat elongate, ... detritus.

12. Thorax not more than moderately transverse, and not wider than elytra, . 13.
    Thorax extremely transverse, and slightly wider than the elytra, . . . laticollis.

13. Species of cylindric form (the length of thorax and elytra together being about three times the greatest width), ... 14.
    Species of shorter and broader form (the length of thorax and elytra together much less than three times the greatest width), ... 15.

14. Shoulders not at all produced or angular. Species less than 2 m.m. in length, linearis.
    Shoulders angular, prominent. Species more than 2 m.m. in length, . . longulus.

15. Humeral angles prominent, ... 16.
    Humeral angles not prominent, ... 22.

16. Second joint of antennæ not less than half as long as first, ... 17.
    Second joint of antennæ much less than half as long as first, . . . collaris.

17. Antennæ very little, if at all, longer than head (including rostrum) and thorax, ... 18.
    Antennæ considerably longer than head (including rostrum) and thorax, . longicornis.

18. Length of elytra along suture about one quarter longer than of head (including rostrum) and thorax, ... 19.
    Length of elytra along suture scarcely longer (especially in the female) than of head (including rostrum) and thorax, ... humeralis.

19. Elytra across the base as, or nearly as, wide as in widest part. Tarsi unicolorous, ... 20.
    Elytra across the base much narrower than in the widest part. Lobes of the tarsi paler than claw joint, ... 21.

20. A conspicuous patch of pale squamosity at the shoulder, ... angularis.
    Elytra without conspicuous markings, formed by patches of squamosity, . ineptus.

21. Thoracic impressions well defined, ... gracilis.
Thoracic impressions almost obliterated, ... scutatus.

22. First joint of the antennæ only moderately thicker than second, and much shorter than joints two and three together, ... 23.
First joint of the antennæ quite double the thickness of the second, and scarcely shorter than joints two and three together, ... robustus.*

23. Humeral angles rectangular, or nearly so, and quite distinct, though not prominent, ... 24.
Humeral angles so rounded off as to be quite effaced, ... oscillans.

24. Intermediate joints of the antennæ comparatively slender, so that the club appears well defined, ... 25.
Intermediate joints of the antennæ rather thick, so that the club does not appear very distinct, ... 27.

25. Antennæ unicolorous, ... 26.
Antennæ black, with the base red, ... simplex.

26. Lobes of tarsi conspicuously pale in colour, ... tarsalis.
Tarsi unicolorous, or nearly so, and not differing much in colour from the tibiæ, ... pusillus.

27. Punctuation of elytra of the description usual in the genus; tarsal lobes small, 28.
Punctuation of elytra much coarser than in most species of the genus; tarsal lobes of usual size, ... punctipennis.

28. Second joint of antennæ longer than wide, ... similis.
Second joint of antennæ very short and beadlike, ... debilis.

T. B.

Fam. CURCULIONIDÆ.

RHYNCOGONUS (nov. gen.).

The insect for which I propose this generic name has the appearance of a large flat Otiorhynchus, with very elongate antennæ, and differs from that genus by the shorter rostrum, by the very elongate scape of the antennæ, by the less widely separated hind coxæ, and by the truncature of the hind tibiæ being broader and shorter, and not interrupted nor prolonged above. It would thus appear to be by no means really allied to any other described form, unless it be to Psomeles, which was unknown to Lacordaire, as it is to myself, and only imperfectly characterized. Elytrogonus and Elytrurus have not the otiorhynchoid form of the rostrum; and Celeuthetes, which resembles Rhyncogonus in this respect, has very large scrobes. The rostrum in Rhyncogonus is only as long as it is broad; the eyes are convex

* Only the female of this species is known. It is possible that the first joint of the male antennæ may be less robust.

and outstanding, and the apex of the rostrum is considerably broader than the part above it; the scrobes are very short, confined in fact to the length of the outstanding pterygia: the mentum is broad and quite flat, and is separated from the sides of the head by a broad cleft, so that in one of the two individuals before me (the male) the maxillæ are concealed. I have associated with this remarkable species a second of very different appearance, resembling rather a Peritelus than an Otiorhynchus, and having much shorter antennæ and comparatively more widely separated hind coxæ, but which otherwise is not, so far as I can detect, distinguished by any important structural character, so that I have not thought it proper at present to treat it as a distinct genus.

D. S.

Rhyncogonus blackburni, n. sp.—Nigrinus, parum nitidus, subplanatus, supra fere sine pubescentia; capite strigoso, prothorace conico-cylindrico, dense punctato, elytris seriatim punctatis, apice acuminato. Long. ♂ inc. rost. $12\frac{1}{2}$, ♀ 17 m.m. (Plate v., f. 28).

Antennæ slender and elongate; scape reaching as far back as half the length of the thorax; funiculus not so long as the scape; club very slender and elongate, very little thicker than the funiculus, conspicuously three-jointed. Eyes nearly as remote from the prothorax as from the insertion of the antennæ. Thorax about as long as broad, much narrower than the elytra, distinctly narrowed in front, densely and rather coarsely punctate. Elytra rather flat, broad, with sharply and abruptly inflexed pseud-epipleuræ, and internal to these, with about a dozen rather irregular series of punctures.

The sexual characters, if I interpret them correctly from the two individuals before me, are very remarkable: the male not half the bulk of the female, and the ridge near the side of the elytra, marking off the pseud-epipleuræ, is less definite, and is in fact quite wanting at the shoulders, while in the female it is definite and well-elevated from base to apex; the apical segments of the hind-body are scarcely so long, and the basal segments are a little impressed, and the maxillary palpi (and even the extremities of the labial) are exposed. In both sexes the apical ventral segments are densely pubescent, more especially the apical one.

Mr. Blackburn informs me that this species is found very rarely, by beating trees on the mountains near Honolulu.

D. S.

Rhyncogonus vestitus, n. sp.—Fusco-niger, griseo-squamosus, latiusculus, parum convexus, prothorace elytris multo angustiore, his lateribus rotundatis, pseud-epipleuris latis, tantum ad humeros carinatis. Long. inc. rost. 8–9 m.m.

Antennæ moderately long and stout; scape not extending so far back as half the length of thorax. Eyes very prominent. Thorax not quite so long as broad, rather rounded at the sides, and distinctly narrower in front than at the base; it as

well as the rostrum and elytra is covered with very fine depressed scales, concealing the sculpture. Elytra broad and rather flat, much curved at the sides, the apex a little acuminate, bearing numerous longitudinal series of fine punctures, the sides a good deal inflexed, but this broad lateral portion not marked off by any carination except for a short distance at the shoulder. On the under-surface the squamose covering does not cover the middle of the body, where there is only a fine pubescence; the apical ventral plates densely pubescent.

Maui. No. 110. Two specimens, differing very little from one another, except that one has a dark mark at the side of each wing case, owing to the absence of the scales at this point.*

D. S.

Acalles.

Acalles lateralis, n. sp.—Latus, niger, supra piceus, tenuiter squamosus, elytris plaga magna laterali albida. Long. exc. rost. 4 m.m.

Thorax broad and somewhat flattened, so as to form an abrupt edge at the side, constricted in front and slightly narrowed behind, depressed in the middle in front of the scutellum, and with some black squamosity on the front margin in the middle arranged so as to give the appearance of two angular prominences. Elytra with very large punctures, and with the second and fourth interstices more raised, but in a broken manner, and bearing on the elevated portions a few erect scales; the general colour is dark, but there descends from each shoulder a broad and definite white patch which curves inwards and backwards, so as to nearly reach the suture about the middle.

Oahu. No. 37.

D. S.

Acalles duplex, n. sp.—Valde convexus niger, pallide squamosus, rostro piceo, antennis rufis, clava crassa; prothorace in medio minus argute sulcato; elytris grosse punctatis. Long. exc. rost. 3¼—4 m.m.

♂, Rostrum broad, closely punctate. Thorax abruptly constricted in front, behind the constriction slightly narrowed towards the base, scarcely so long as broad; elytra rather broad at the base, with the humeral angles swollen, with very coarse punctures or pits, and with the second interstice more elevated than the others and rising behind the middle to an acute elevation. The female is a smaller and narrower insect, with the thorax much less broad, and the shoulders of the elytra undeveloped, and the elevation of the second interstice very slight.

This species is found by beating the Koa tree on the mountains near Honolulu; and Mr. Blackburn is sure the two forms are the sexes of one species. The species is, no doubt, quite distinct from A. angusticollis, by its form, sculpture, and clothing; the evident humeral angles of the elytra are of themselves sufficient to characterize A. duplex.

D. S.

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* This species is extant in the National Collection, where it is indicated as a new genus and species by Jekel.

Acalles angusticollis, n. sp.—Angustus, valde convexus, niger, griseo-squamosus, rostro piceo, antennis rufis; prothorace latitudine longiore, cum elytris minus argute longitudinaliter carinato, his basi angusto, lateribus rotundatis. Long. exc. rost. 3¼ m.m.

Rostrum rather broad, closely punctate in front of the antennæ, behind them squamose; club of antennæ rather elongate, oval. Thorax much narrower than the elytra, a little constricted in front, and rather narrower in front than at the base, the sides a little rounded; it is closely covered with pallid depressed scales, and is indistinctly longitudinally costate, and the costæ bear a few erect setæ or scales, some of which are black in colour. Elytra covered with a pale squamosity like the thorax, and bearing each three or four rather indistinct costæ, none of which reach the apex, and of which only the second commences at the base; across the middle is a narrow indistinct black fascia, and the upright scales seen on the costæ are in front of this all pallid white, behind it some few of them are black.

The specimen described, No. 410, was beaten from Koa trees on Haleakala, island of Maui; two individuals, much rubbed and considerably smaller, found by beating in the mountain forests of Honolulu, seem to me to belong to the same species.

D. S.

Acalles mauiensis, n. sp.—Minus brevis; piceo-niger, setis nigris et cinereis intermixtis vestitus; elytris pone medium circum suturam bimaculatis; rostro tibiarum apice et tarsis rufescentibus; antennis testaceis; harum funiculi articulo secundo quam primo multo minore; prothorace vix transverso, antice constricto, postice parum angustato, 3-sulcato, interstitiis inter sulcas fortiter inæqualiter elevatis, lateribus parum rotundatis; elytris minus brevibus, a latere fortiter rotundatis, obscure striatis, striis obscure crasse punctatis, interstitiis 2° et 4° fortiter nec æqualiter elevatis.

This species bears a good deal of resemblance to A. lateralis, Sh., though very much smaller. It is sufficiently characterized, I think, by the comparative size of the first two joints of the funiculus, the two large whitish spots, one behind the other along the suture on the hinder half of the elytra, and the irregularity of the elevated ridges on the thorax and elytra (each of those on the former consisting in reality of three short ridges placed in a longitudinal line, and the second interstice of the elytra rising gradually to a strong elevation just before the middle, and then abruptly ceasing altogether).

A single specimen was beaten from Aleurites triloba, at an elevation of about 4000 feet, on Haleakala, Maui.

T. B.

Acalles ignotus, n. sp.—Brevis; nigro-cinereus, pedibus nigris, antennis, tarsis et tibiarum apice rufescentibus; setis nigris et cinereis intermixtis vestitus; prothorace fortiter transverso, antice constricto, postice parum angustato, 5-sulcato, sulco medio carinam intrinsecus ferenti, lateribus postice fere rectis; elytris brevibus a latere fortiter rotundatis, obscure striatis, striis vix distincte punctatis, interstitiis 2°, 4°, et 6° fortiter regulariterque elevatis. Long. (rostr. inc.) $3\frac{1}{2}$ m.m.

This insect is allied to A. duplex, Sh., but differs from it in being smaller, with the elytra very much more strongly and evenly rounded on the sides, and in the much less distinct striation and punctuation of the elytra, of which the elevated interstices, moreover, are not more elevated in one part than another (though they become less distinct at the apex).

A single specimen was taken on Oahu, but the particulars of the capture have not been preserved.

T. B.

Acalles decoratus, n. sp.—Sat elongatus; nigricans, setis nigris et cinereis intermixtis vestitus, prothoracis sulco-mediali squamis albidis dense vestito; elytrorum sutura, fascia lata ante medium, macula pone medium, et apice, cinereo-albidis; rostro, antennis, tarsis et tibiarum apice rufis, femoribus cinereo-maculatis; antennis sat brevibus funiculi articulo secundo quam primo multo minore; prothorace vix transverso antice sat fortiter postice leviter contracto, a latere sat rotundato, obscurelongitu dinaliter sulcato sulci lateribus leviter elevatis; elytris fortiter striatis, interstitiis rotundatim convexis. Long. 3 m.m.

Its diminutive size will distinguish this insect from most of its Hawaiian allies; moreover, from A. ignotus its much larger thorax, and from A. mauiense the regularity of its sculpture, will at once separate it.

A single specimen was obtained by beating branches of trees, at an elevation of about 2000 feet, on Lanai.

T. B.

The following observations are suggested by certain specimens of Acalles in my collection :—

1. A. angusticollis, Sh.—I hesitate a good deal to regard as incapable of distinction specifically the two forms which Dr. Sharp includes under this name; but, if they be identical, I think there will have to be included under the same name a specimen from Kauai, somewhat intermediate in size and having the ridge on the elytra less elevated; and also a specimen from Maui which (although it certainly appears to me narrower and more elongate, and has its entire upper surface densely and confusedly clothed with mingled ashy and black scales, and long setæ) I cannot distinguish from the Oahu specimens attributed to A. angusticollis—at any rate without removal of scales—by sufficiently strong characters to assure me that it is not merely a very fresh and brightly-coloured example of that insect.

2. A. mauiensis, Bl.—A single specimen, taken on Lanai at an elevation of about 2000 feet, is possibly referable to this species, though more probably only requiring the collection of more specimens to be proved distinct. The specimen is evidently much abraded, and therefore the proportions of the parts are difficult to compare with the same in a specimen pretty well clothed with setæ, but the thorax appears to be narrower, and the sculpture of the whole insect (though similar in plan to that of A. mauiensis) is much feebler; moreover, instead of the hinder part of the elytra bearing white spots, nearly the entire apical third is white.

T. B.

Chænosternum (nov. gen. Cryptorhynchidarum).

This new generic name I propose for an insignificant-looking insect, which bears a general resemblance to an Omias, but has the rostrum and sternum exaggeratedly cryptorhynchiform. The following are its characters:—

Rostrum and antennæ very much as in Acalles, the second joint of the funiculus in the latter being rather small; eyes coarsely facetted, rather depressed, and not visible from above. Thorax much like that of Acalles, but with the surface nearly free from inequalities; it is somewhat abruptly constricted a little in front of the middle, and has a short longitudinal fovea in the middle of the base, not extending so far as half way towards the front of the thorax; the anterior margin is strongly produced over the head. There is no scutellum visible. The elytra are exactly of the width of the thorax at their base, becoming very much wider in the anterior third of their length, then gradually but strongly accuminated to the apex; the sides very strongly rounded, the surface free from inequalities but deeply striated, the striæ coarsely punctured, the interstices regularly, strongly and roundly convex. The channel for the reception of the rostrum is very deep. The mesosternum is not at all emarginate, but abruptly truncate between the middle of the intermediate coxæ, and forms the posterior end of the rostral channel, but does not extend at all along its sides, the hind portion of its sides being limited by the extreme anterior part of the intermediate coxæ, in the same way that its sides on the prosternum are partly limited by the anterior coxæ, and there being between the anterior and intermediate coxæ a gap in the sides of the channel. The intercoxal process of the hind body is wide and quadrate, with its anterior margin squarely truncate. The metasternum is very narrow. The second segment of the hind body is nearly as wide as the third and fourth taken together, and is separated from the first by an arched suture. My specimen is perfectly glabrous, but may possibly be abraded. The tarsi are very decidedly more slender than in Acalles. The genus is near Acalles, Tragopus, and Anaballus. The form of the rostral channel strongly separates it from the latter two—the form of the intercoxal process of the hind body from Acalles, the coarsely facetted eyes and unarmed femora from Tragopus.

T. B.

Chænosternum konanum, n. sp.—Sat elongatum; brunneo-nigrum; pedibus nigris, antennis tarsis et rostri apice rufis; rostro parum robusto; prothorace vix transverso, fortiter crebrius punctato, antice fortiter contracto et super caput fortiter producto, a latere sat rotundato, postice parum contracto, ad basin in medio longitudinaliter sulcato; elytris sub-oblongis, a latere fortiter rotundatis, apice sat productis, fortiter striatis, striis crasse punctatis, interstitiis fortiter rotundatim elevatis. Long. (rostr. incl.) $2\frac{3}{4}$ m.m.

A single specimen occurred in the Kona district of Oahu, but exact particulars of the capture are not forthcoming.

T. B.

Hyperomorpha (nov. gen. Cryptorhynchidarum).

The following are the characters of a small insect, for which it seems necessary to provide a new generic name, and which is evidently somewhat allied to Acalles, while in some respects resembling Sympiezoscelus—though a careful comparison with the latter has led me to the opinion that its relation to it is not close.

Rostrum rather short and wide as compared with Acalles, rather abruptly bent down close to the base, gradually narrowed from the base for about a third of its length, then suddenly widened, and continuing about the same width almost to the apex, where again it is a little widened; the whole of its upper surface clothed with short scaly setæ; its scrobes commencing about the middle, and running obliquely backwards to its base; antennæ inserted about the middle of the rostrum, short, and not at all robust; scape gently increasing in thickness, and not reaching the eyes when set back; funiculus seven-jointed, joints one and two about the same length, and longer than the rest, the other joints short (especially 5–7); club longer than wide, nearly as long as scape, not distinctly articulated; eyes coarsely facetted, depressed, acuminated at the lower end, not approximated above; prothorax considerably narrower than, and scarcely a third of the length of, the elytra—transverse, scarcely contracted at the base, but much contracted from the middle to the front, with gently rounded sides, its anterior border moderately produced over the head, its base truncated, the ocular lobes feeble; scutellum not visible; elytra about twice as long as together wide, very closely embracing the body, only moderately convex, and not abruptly sloped off behind, their sides nearly parallel (but slightly narrowed backwards) in the basal $\frac{3}{4}$, in the apical fourth more strongly contracted, but quite obtuse at the apex; the whole upper surface clothed evenly but not very densely with depressed scales, and quite devoid of inequalities; legs rather long and feeble, especially the femora, the lower side of which is rather deeply emarginate a little before the apex, the emargination being preceded by a small tooth; the tibiæ compressed, not very much enlarged towards the apex, where there is a small spine as in Acalles; the

tarsi not much different from those of Acalles; the legs clothed with short, scaly setæ; the second segment of the hind body is a little shorter than the third and fourth together, and the suture separating it from the first is straight; the process between the hind coxæ is broad and somewhat angular in front; the rostral canal is very broad and deep, but only impinges slightly on the mesosternum, the front margin of which is only gently emarginate; and there being quite a considerable portion of the mesosternum intact between the end of the rostral canal and the front of the metasternum, which latter is proportionally about as long as in Cryptorhynchus; the under-surface is excessively strongly and coarsely punctured, and is evidently clothed with scales (though in my specimen it is a good deal abraded); I observe that the mesothoracic epimera seem a little more directed upwards than in most of the allied genera: there is a considerable superficial resemblance in this insect to some species of Hypera.

T. B.

Hyperomorpha squamosa, n. sp.—Sat elongata nigricans, squamis cinereis vestita, elytris rufopiceis, antennis tarsisque testaceis; rostro robusto, basin prope contracto; prothorace transverso obscure crasse punctato, antice fortiter angustato; elytris subparallelis, obscure striatis, striis crasse punctatis, sculptura sub squamas abdita; subtus crasse profunde punctata. Long. (rostr. incl.) 4 m.m.

A single specimen was taken from very wet moss, on the edge of a mountain stream, near Honolulu.

T. B.

Calandra.

Calandra remota, n. sp.—Nigra, nitida, fortiter punctata, rostro elongato, ad antennarum insertionem crassiore; prothorace elongato, anterius constricto. Long. (inc. rost.) 5–6 m.m.

Rostrum nearly as long as the thorax, sparingly punctured and shining; eyes very near to prothorax; beak constricted in front of them; antennæ inserted at one-third or fourth of the length of the rostrum from the eyes; basal joint as long as the funiculus; club well marked; thorax very large, covered with distant, extremely large punctures; elytra deeply sulcate, and the grooves bearing large punctures, interstices narrower than the grooves, and remotely punctate, nearly covering the body, so that the pygidium is small.

This remarkable species has been found near Honolulu, and may be a native of some other country; but I have failed to identify it, and it does not exist in the British Museum collection. It occurs commonly in the stems of banana and the prickly pear, near Honolulu.

D. S.

Oodemas.

Oodemas tardum, n. sp.—Oblongo-ovatum; nitidum; nigro-æneum ad viridem accedens, antennis tibiis tarsisque plus minusve rufescentibus; oculis prominulis; rostro haud æqualiter arcuato, fortiter punctato rugatoque; antennis rostro capite prothoraceque conjunctis paulo brevioribus, scapo elongato, funiculi articulo primo brevi secundo elongato; prothorace transverso, antice angustato, distincte crebrius punctato; elytris thorace sat latioribus, antice vix, postice obsolete, striatis, parce fortiter seriatim punctatis, interstitiis confuse subtilius punctatis; subtus abdominis parte anteriori minus fortiter punctata. Long. 5–5½ m.m.

This insect resembles O. infernum, mihi, but is readily distinguished by the peculiar shape of the rostrum (which, instead of being slightly and quite regularly arched from base to apex, appears to be almost angularly bent downwards from the middle) by the much darker colour, and by the greater distance apart (in the rows) of the larger punctures on the elytra.

A few specimens were taken from the bark of a tree, at an elevation of about 4000 feet, on Haleakala, Maui.

T. B.

Oodemas æquale, n. sp.—Oblongum; nitidum; æneum, antennis pedibusque plus minusve rufescentibus vel testaceis; rostro brevi, distincte subtilius punctato; oculis vix convexis; antennis rostro capite prothoraceque conjunctis sat evidenter brevioribus, scapo brevi, funiculi articulis primo et secundo subæqualibus sat elongatis; prothorace leviter transverso, antice angustato, obscure subtilissime punctato; elytris prothorace latioribus, vix evidenter striatis, parce nec fortiter seriatim punctatis, interstitiis parce subtiliter punctatis; subtus abdominis parte anteriora parce subtiliter punctata. Long. 4–4½ m.m.

This species is remarkable for the exactness with which the base of the thorax is applied to the elytra, so that the curve formed by the side of the thorax and elytra (viewed from above) is almost perfectly continuous. This character readily distinguishes it from O. obscurus, mihi which in some respects it resembles. The apex of the last segment in the male is abruptly truncate, in the female is rounded.

A short series was obtained by beating branches of trees, at an elevation of about 2000 feet, on Lanai.

T. B.

Oodemas crassicorne, n. sp.—Oblongum; elongatum; nitidum; æneum, antennis pedibusque rufescentibus; oculis subprominulis; rostro brevi, obscure minus subtiliter punctato; antennis crassiusculis, rostro capite prothoraceque conjunctis sat evidenter brevioribus, scapo brevi, funiculi articulo primo brevi, secundo elongato; prothorace transverso antice angustato, obscure subtiliter punctato;

elytris prothorace evidenter latioribus, haud striatis, obscure subtilius seriatim punctatis, interstitiis parce subtiliter punctatis; subtus abdominis parte anteriore subtiliter punctata. Long. $3\frac{1}{2}$–$3\frac{3}{4}$ m.m.

This species is somewhat closely allied to the preceding, which it resembles in regularity of outline; but I am obliged to treat it as distinct, on account of the thickness of its antennæ and the relative length of the first two joints of the funiculus, together with the delicacy of the punctures which form rows on the elytra.

A few specimens occurred on Lanai, but the exact particulars of the capture escaped record.

T. B.

The inspection of recent captures in Oodemas has brought me to the conclusion that I was misled into regarding O. substrictum, mihi (E. M. M., vol. xvii., p. 200) as a distinct species by the occurrence of a certain amount of apparent variation in the relative length of the first and second joints in the funiculus of the antennæ of O. obscurum, mihi. I have now satisfied myself that this distinction cannot be maintained, the first joint in all my specimens of O. substrictum (so-called) being at any rate decidedly shorter than the second. The other differences mentioned in my description signify no more, I think, than that the insect varies somewhat in size and intensity of sculpture. The insect should stand therefore as follows:—

O. obscurum, Bln.
var. O. substrictum, Bln.

In my earlier descriptions of Oodemas I appear to have passed over, without sufficient notice, some characters that have since acquired a more evident importance through the discovery of additional allied species; and as, moreover, the descriptions appeared in various publications and at various times, I think it will be well here to pass briefly in review the distinguishing characters of the species described up to the present time:—

1. First joint of funiculus of antennæ much shorter than the second, . . 2.*
   First joint of funiculus of antennæ not differing much from the second in length, ... 9.†
   First joint of funiculus of antennæ much longer than the second (a rather large species, oval in form, not very shining, its elytra absolutely without striation, but bearing rows of large punctures), ... O. mauiense.

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* In O. obscurum the comparative elongation of the second joint is less marked than in the other species of this group.

† In O. olindæ the second joint is a little longer than the first, but the unusual elongation of the first joint seems to bar the species from being placed among those in which the first joint is very short.

2. Rostrum regularly arched, or almost straight, and not noticeably dilated at the apex, ... 3.
   Rostrum irregularly or angularly arched, ... 8.*
   Rostrum strongly dilated at apex (a large species with long antennæ and legs, ovate in form, the elytra almost vertical behind, bearing rows of punctures, and obscurely striate near the apex), ... O. nivicola.

3. Rostrum distinctly punctured, ... 4.
   Rostrum not distinctly punctured (a small, narrow, elongate insect, with the elytra scarcely striate, and the punctuation very confused), . . O. angustum.

4. Elytra not distinctly striated (at least not in the anterior portion), . . 5.
   Elytra distinctly striated throughout (a species of medium size and oblong-ovate form, very shining, with stout legs and antennæ), . . . O. robustum.

5. Species of narrow, elongate form, with the elytra regularly curved on the sides, and not becoming, close to their base, abruptly wider than the thorax, ... 6.
   Form wide ovate, elytra bi-sinuate (*i. e.* with the sides much more strongly rounded in front than behind, and consequently abruptly dilated immediately behind the thorax). [A species of medium or small size, oval in form, very shining, elytra obscurely striated, the striæ strongly punctured], ... O. obscurum.

6. Shining species, with eyes somewhat convex, ... 7.
   Surface much less shining than usual in the genus, with the eyes very depressed (a large, oblong-oval species, elytra very obscurely striated, with rows of strong punctures), ... O. borrei.

7. The larger punctures on the elytra rather closely ranged in very distinct rows (a rather small, brilliantly-shining species; narrow, elongate; elytra hardly striated, interstices very distinctly punctured), . . O. halticoides.
   Rows of punctures on the elytra very obscure (a small, oblong species, with stout legs and antennæ), ... O. crassicorne.

8. Elytra not shining, with no distinct punctuation, except rows of very large punctures (a large species of ovate, almost subquadrate, form), . . O. sculpturatum.
   Elytra very shining, with rows of moderately large punctures, and interstices more finely punctured (a rather large species of oblong-ovate form), ... O. tardum.

9. Elytra gently sloped off behind; rostrum not abruptly bent near the middle, 10.
   Elytra almost vertical behind; rostrum abruptly bent a little in front of the middle (a large, brilliantly-shining species of elongate-oval form, acuminate behind, with long rostrum, long, slender antennæ, very stout legs, and elytra margined along the base), ... O. olindæ.†

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* In O. sculpturatum this character is less strongly developed than in O. tardum.

† This species might not unreasonably, I think, be regarded as the type of a new genus. In some respects it seems to approach Heteramphus.

10. Ovate species, ... 11.
A narrow, elongate, rather small species; very shining, with indistinctly striated elytra, ... O. æquale.

11. Antennæ rather elongate; elytra not distinctly striated (a rather large, shining species), ... O. infernum.
Antennæ short; elytra in front strongly striated, with the striæ extremely strongly punctured, behind quite smooth (a species of medium size, and very shining, of brassy-green colour), ... O. ænescens.
Antennæ short; elytra strongly punctate-striate, the punctate striæ not much fainter near the apex than in front (a species of medium size, shining, and of a black or reddish-black colour), ... O. insulare.

T. B.

Heteramphus (nov. gen.).

This is a remarkable form of Cossonidæ, apparently without any ally, having all the coxæ widely separated, the metasternum very short, and the scutellum entirely concealed. In Mr. Wollaston's arrangement of the Cossonidæ, it would be placed near Styphloderes and Cotaster, from which, however, it greatly departs by the great distance between the front coxæ, as well as by the facies, which is nearer that of some of the Erirhinida than to any Cossonidæ known to me. The rostrum is elongate, but not so long as the prothorax, curvate, subcylindrical, and quite as narrow immediately in front of the eyes as it is at the apex; the antennæ are rather long and slender, with elongate scape, seven-jointed funiculus, and rather elongate club, the apical half of which is evidently annulate; they are inserted at a distance from the apex, but conspicuously in front of the middle; and the scape is lodged in a deep, straight scrobe, which extends vaguely to the lower portion of the eye; this organ is rather elongate. The prothorax is large; the front coxæ are quite embedded, not at all prominent, widely separated; the prosternum is in no way impressed, is not at all emarginate in front, is quite flat between the coxæ, and has no rudiment of a prosternal process. The middle coxæ are widely separated; and the large mesosternum is quite flat, and throughout on the same plane as the metasternum; this lattter is extremely short. The front tibiæ are armed with a well-developed hook; the middle and hind tibiæ with a rather smaller one; the tarsi are four-jointed, not largely developed, furnished with hairs beneath, the fourth joint broader, its hind edge emarginate, but not bi-lobed.

The species show so much difference, that they would, at first sight, scarcely be deemed all of one genus. In H. cylindricus the hind coxæ are not so extremely separated as they are in the other species; and H. hirtellus has the rostrum broader at the tip; but at present I do not think it desirable that they should be separated generically, as there are probably other species existing in the islands which might connect them more intricately.

Although, in Mr. Wollaston's arrangement, these insects would, on account of their concealed scutellum and very short metasternum, be placed far from the genus Mesites, yet in their general structure they appear more similar to that genus than to any other known to me.

D. S.

Heteramphus wollastoni, n. sp.—Latus, subplanatus, niger, subopacus, antennis tarsisque piceis; thorace majore, anterius angustato et subconstricto, crebre punctato, basi marginato, dorso ante basin impresso; elytris seriatim punctatis, ad apicem attenuatis, in parte apicali plagis vagis setulosis. Long. (inc. rost.) 8–10; lat. 3 m.m.

The surface of the thorax is a little irregular, and its punctuation is moderately close and coarse; the sides are very slightly narrowed at the base; the basal margin thick; elytra very truncate at the base, angulate at a distance from the sides, so that there is a broad pseud-epipleura, furnished with seven series of punctures, and two others at the sides, that is on the pseud-epipleura; the rather distant punctures are placed on very obsolete striæ; the broad interstices are almost impunctate, and the third and fifth are much broader than the others; on the apical portion, there are some flavescent setæ, placed in an irregular or patchy manner.

The male has the rostrum broader and less cylindrical than it is in the female; and its anterior portion (commencing just behind the insertion of the antennæ) is just perceptibly dilated; it is also more closely punctate, and less shining than in the female.

This insect is found not very rarely in the stems of a plant called the "silver sword," in the mountains near Honolulu, at an elevation of 3000 feet, or more.

D. S.

Heteramphus foveatus, n. sp.—Latus, niger, subopacus, antennis tarsisque piceis; thorace majore, anterius angustato, lateribus rotundatis, crebrius fortiter punctato, basi obsolete marginato, dorso ante basin rotundato-foveolato; elytris striatis, interstitiis ad latera et ad apicem parce setulosis. Long. (inc. rost.) 7; lat. $2\frac{1}{2}$ m.m.

Similar to H. wollastoni, but abundantly distinct; rather smaller, with the thorax evidently rounded at the sides, and coarsely punctate, and only very indistinctly margined at the base. The elytra are somewhat deeply striate; and the striæ are marked, especially on the basal portion, with coarse but indefinite punctures; all the interstices are of nearly one width, and near the sides and apex are setulose.

The two individuals described are probably males: they have the rostrum broad and much punctate, and becoming just perceptibly broader from the base towards the apex, but without any dilatation near the insertion of the antennæ.

This species occurs in company with H. wollastoni.

D. S.

Heteramphus hirtellus, n. sp.—Latiusculus, piceus, in thorace et in elytris crebre setosulus; thorace majore; anterius angustato, crebrius fortiter punctato, dorso ante basin foveolato; elytris striatis, striis fortiter punctatis. Long. (inc. rost.) 5 m.m.

This is a very distinct species, similar in form to H. wollastoni and H. foveolatus; it is readily distinguished by the setulose surface and more pallid colour, and the smaller tarsi. The thorax is rounded at the sides, not margined at the base. The elytra are striate; and the striæ bear coarse punctures; the fourth and fifth striæ are much abbreviate behind, and are deeper than the others.

The unique individual is in bad condition, and has been covered with some dirt or exudation, the removal of which has been difficult and only partially effected. It is no doubt a male; the rostrum is densely and rugosely punctured, and quite evidently dilated at the insertion of the antennæ.

Very rare; found by sifting dead leaves, high up on the mountains. No. 377.

D. S.

Heteramphus cylindricus, n. sp.—Angustulus, subopacus, niger, antennis, tarsisque piceis; thorace elongato, minus crebre punctato; elytris leviter striatis, striis obsolete punctatis. Long. (inc. rost.) $4\frac{1}{2}$; lat. $1\frac{1}{4}$ m.m.

This species has somewhat the appearance and form of a narrow Baridius or of a Mecinus. The thorax is rather rounded at the sides, not margined at the base, rather sparingly, not finely, punctate; the punctures more obsolete on the disc. Elytra only as broad as the thorax, not shining, rather faintly striate; and the striæ bearing only very distant and indistinct punctures; but the sculpture is rather more accentuated near the apex; the pseud-epipleuræ not so definitely marked off as in the other species.

I have only a single individual of uncertain sex.

Two examples of this species have been found in company with H. wollastoni and H. foveatus.

D. S.

Phlæophagosoma.

Rhyncolus tenuis, Germ.—The insect described by Boheman in the Eug. Res. under the name of Rhyncolus tenius (changed by Gemminger to tenuis, on account of the prior R. gracilis, Rossi), cannot, adopting the views of Mr. Wollaston as to

genera near Rhyncolus, be correctly associated with what he considers to be the true Rhyncoli, but the species comes so near to the New Zealand Phlæophagosoma that I think it may be placed in that genus: it differs slightly from the New Zealand P. dilutum in that the third tarsal joint is not broader than the second, and that the front and middle coxæ are more widely distant.

Pseudolus. (New generic name.)

The second species of Rhyncolus described by Boheman (under the name of R. longulus) is so distinct as to require a new generic name, for it apparently cannot be associated in any of the numerous genera recently proposed by Mr. Wollaston. It is of very elongate form; the eyes are remote from the margin of the thorax, and are coarsely facetted; the rostrum is largely developed, and its apical portion is evidently broader than the basal; the third joint of the tarsi is broad and deeply lobed, the fourth stout and parallel (that is, not at all more slender near the base), the front coxæ are widely separated, the middle and hind coxæ still more widely, the hind ones scarcely more distant than the middle ones. The male is of more elongate form than the female, and the apical portion of its rostrum is rather more dilated, the base of the ventral segments is rather more hollowed, and the apical segment longer, and with a patch of pubescence along its hind-margin on either side of the middle.

D. S.

Dolichotelus (nov. gen.) Cossonidarum (?).

The affinities of the minute insect for which I propose this name are not quite clear to my mind, but I have concluded that it is most naturally placed among the anomalous genera that appear to be connecting links between the Cossonidæ and Scolytidæ. The following, as far as I can ascertain them without dissection, are its characters.

Head and rostrum not clearly distinguishable *inter se*, the latter being merely a very short and scarcely narrowed prolongation of the former. The head (including the pseudo-rostrum under the term) is not much less than twice as long as broad, and has parallel sides. The antennæ are inserted very little behind the front of the head (at a distance in front of the eyes nearly equal to the diameter of the eyes) in the sides of the pseudo-rostrum. The palpi are distinctly visible, but are very short, and I have not succeeded in making a satisfactory study of them; I can see, however, that they are somewhat cylindric in form, with the apex more acuminate. The antennal furrows are deep and oblique, passing below the eyes and underneath the head. The head does not appear to be at all retractile, neither is it vertical, but continues the plane of the thorax, to which it is closely applied at the base, and of about equal width; its central suture on the

under surface is strongly marked and deep. The eyes are rather large, nearly circular, coarsely facetted, little prominent, placed on the sides of the head in such a position that their hind margins are about intermediate between the back of the head and the front of the pseudo-rostrum, their diameter equalling about a quarter of the length of the head (including the pseudo-rostrum). The antennæ are short, and not particularly thick; the scape is slightly bent, of uniform thickness, and about as long as the diameter of the eye; in the funiculus the first joint is only a little more slender than (and not much less than half as long as) the scape; the next is shorter and more slender, but (under a good microscope) well-defined; then follow several minute joints (I am not sure whether three or four) very closely applied to each other and gradually increasing in stoutness, beyond which is a rather large and flattened club considerably longer than wide; the scape, funiculus and club do not differ very much in length; the funiculus being, however, somewhat shorter than the others. The thorax is a little longer than the head (inclusive of the pseudo-rostrum), and is quite twice as long as wide, and almost cylindric, the front margin being a little narrower than the base, and the sides nearly straight; the margins are not reflexed. The elytra are about half the length of the whole insect, nearly the same width as the thorax, quite parallel, and abruptly rounded off at the apex. The prosternum and metasternum are very elongate, the mesosternum narrow. The front coxæ are nearly circular, rather prominent, and not widely separated, the intermediate not much different, and the hind nearly contiguous. The thighs are oblong, oval, compressed; the tibiæ short, dilated from base to apex. Of the tarsi the apical joint is elongate, and the claws are larger and stout; the preceding joint is wide, bi-lobed, the first and second joints being short and rather broad. The hind body is very similar to that of Pentarthrum.

T. B.

Dolichotelus apicalis, n. sp.—Linearis; pallide testaceus, capite infuscato, elytrorum basi apiceque (hoc late illo angustissime) et abdomine nigricantibus; capite elongato; prothorace fortiter elongato, antice vix angustato, lateribus subparallelis; elytris parallelis obscure nec crebre seriatim punctatis. Long $1\frac{3}{4}$ m.m. Lat. $\frac{1}{3}$ m.

A single specimen was taken from a decaying trunk of a Pandanus, on the mountains near Honolulu. The species is probably rare, as frequent search failed to furnish a second example.

T. B.

Fam. SCOLYTIDÆ.

XYLEBORUS.

Xyleborus obliquus, n. sp.—Piceus, nitidus (? antennis pedibusque testaceis); thorace anterius crebre rugoso, posterius lævigato; elytris seriatim punctatis, apice longius oblique declivo fere mutico. Long. $3\frac{3}{4}$ m.m.

This is very similar to Xyleborus truncatus, but the truncate portion of the elytra is still more prolonged, and is smooth and shining, so that two or three of the series of punctures mark its surface in a very conspicuous manner. At the commencement of the truncation, close to the suture, there is a very minute asperity.

Found very rarely near Honolulu; the only individual I have seen is deprived of all its limbs.

D. S.

Xyleborus truncatus, n. sp.—Fusco-niger, elytris picescentibus, antennis pedibusque testaceis; thorace anterius crebre rugoso, posterius lævigato; elytris seriatim punctatis, apice truncato fere mutico, tantum tuberculis omnium minutissimus quatuor munitis. Long. $2\frac{1}{2}$ m.m.

Extremely similar to the European Bostrichus saxesenii, just perceptibly broader, and with the elytral apex a little more truncate, and broader. The punctures of the elytra on the basal portion are similar to those of B. saxesenii; but the apical truncation is excessively obscurely asperate, and there is a just perceptible tubercle close to the suture, at the commencement of the truncation, and another in a line with it near the apex.

Oahu.

D. S.

Xyleborus rugatus, n. sp.—Nitidus; subcylindricus; rufopiceus, antennis pedibusque testaceis; setis longis minus sparsim vestitus; prothorace antice asperato, postice obscure rugato, grosse confuse punctato; elytris subtilius subseriatim punctatis, postice obscure declivibus, parte declivi asperula minuta triseriatim ferenti. Long. $3\frac{1}{4}$ m.m.

This species is allied to X. immaturus, mihi, and X. truncatus, Sh. It differs from the former in being clothed with longer and more numerous setæ, especially about the thorax, the hinder part of which is sub-opaque, with fine wrinkles, and bears numerous rather coarse but shallow and feeble punctures; also in having the punctuation of the elytra coarser, and the apical asperities of the same very minute. From the latter it differs in having the hinder part of the thorax less smooth, in being much less sparingly clothed with setæ, in having the hinder portion of the elytra

scarcely at all flattened, and the apical asperities (though not so large, yet) more numerous, and running in rows. From X. frigidus, mihi, it differs in form (being much wider), and in having the rows of punctures on the elytra (as in X. truncatus and X. immaturus) placed in evident though not well defined striæ.

A single specimen was taken on Oahu, but the exact particulars of the capture have been lost.

T. B.

Xyleborus insularis, n. sp.—Rufescens, elytris piceo-rufis, antennis pedibusque testaceis, thorace anterius crebre rugoso, posterius lævigato; elytris seriatim punctatis, apice oblique declivo tuberculis duobus conspicuis munito, ante eas tuberculis plurimis minoribus. Long. 3 m.m.

Closely allied to X. truncatus, but rather larger, and with the apex of the elytra less abruptly truncate, and more conspicuously armed. The retuse portion has its surface a little uneven; and near the suture, just before the middle, there is on each side a rather large tubercle. Just before, and at the commencement of, the truncation there are six or eight smaller tubercles, irregularly placed, and at the sides there are a few quite minute tubercles.

Oahu and Kauai.

D. S.

Xyleborus immaturus, n. sp.—Nitidus; subcylindricus; ferrugineus, ore nigricante; setulis sparsim vestitus; prothorace antice asperato, postice subnitido sparsim subtilissime punctato; elytris subtiliter subseriatim punctatis, postice obscure declivibus, parte declivi asperula parva triseriatim ferenti. Long. $2\frac{3}{4}$–3 m.m.

I have specimens of this insect from widely separated localities. They all have an immature appearance, but I think this is due only to the paleness of the colour. X. immaturus is allied to X. truncatus, Sh., but has the elytra much less abruptly sloped behind, with the apical portion hardly at all flattened. It is decidedly more setulose than X. truncatus, and the apical asperities are much more strongly developed, and are placed in three longitudinal series on each of the elytra. There are indications of some of the rows of punctures (which are very fine) being in obsolete striæ.

This species has occurred in dead branches of trees on the mountains of Oahu, at an elevation of about 2000 feet; also on Hawaii.

T. B.

Xyleborus frigidus, n. sp.—Angustus; cylindricus; piceo-niger, prothorace refuscente, antennis pedibusque testaceis; setulis brevibus sparsim vestitus; prothorace antice asperato, postice subnitido obsolete punctato; elytris subnitidis subtilissime seriatim punctatis, postice obscure declivibus, parte declivi asperula minuta subaqualia triseriatim ferenti. Long. $2\frac{3}{4}$ m.m.

This insect resembles X. immaturus, mihi, in having on the hinder part of each of the elytra about three rows of nearly equal tubercles; but it differs in that the tubercles are conspicuously smaller than in X. immaturus, and also in being an extremely narrow, cylindrical, and less shining species, without any trace of striæ on the elytra where the punctures in the rows are excessively fine. My specimen shows only slight indications of being very sparingly furnished with a few short setæ, but may possibly be somewhat abraded.

A single specimen was taken out of a dry twig of Acacia falcata, on Haleakala, Maui, at an elevation of about 4000 feet.

T. B.

Hypothenemus.

Hypothenemus griseus, n. sp.—Brevis; latior; opacus; pallide brunneus; antennis pedibusque flavis; setulis tenuibus nec brevibus vestitus; prothorace in parte anteriori fortiter sparsim rugoso, in parte posteriori subtilissime granulato; elytris creberrime subtiliter punctatis, distincte striatis, interstitiis leviter convexis. Long. 2 m.m.

This species is about the size of the largest H. maculicollis, Sh. Though I have carefully examined the antennæ under a compound microscope, I cannot feel sure whether there are three or four joints in the funiculus. The fine and rather long hairlike setæ with which it is (not very sparingly) clothed, and the sculpture of the elytra—which are rendered opaque by their extremely fine punctuation, and are quite deeply striated—separate the insect widely from every ally known to me. Its colour is a light umber brown, inclining to grey, which is somewhat darker on the thorax.

A single specimen was taken from the stem of a poppy on the plains near Honolulu, where (and elsewhere) the plant grows plentifully; frequent examination of the stems failed, however, to produce the insect again.

T. B.

Fam. ANTHRIBIDÆ.

Mauia (nov. gen.).

The following are the characters of the insect, apparently allied to Ozotomerus, for which I find it necessary to propose the above name:—Head much wider than long; rostrum about equal in length and width to the head (the two together being scarcely longer than wide), with its sides parallel, and apex very obscurely emarginate; rostral scrobes lateral, and consisting of a rounded cavity scarcely

smaller than the eye; antennæ about the length of the head and thorax together, rather slender, the first four joints all elongate, and not differing much among themselves, except that the basal joint is the stoutest, the following three being shorter, but still much longer than wide; the apical four (especially 9–11) somewhat thickened, though still considerably longer than wide, and forming a badly-defined club; eyes rather small (diameter not equalling the length of the basal two joints of the antennæ together), coarsely facetted, rounded behind, truncate in front; prothorax at base same width as base of elytra, slightly widened towards the front in the basal third, then contracted strongly to the anterior margin, which is scarcely half the width of the base, without any transverse carina in front of the base, having the lateral carina extending about half way to the front, the anterior margin strongly convex; scutellum extremely small, transverse; elytra not wider than the prothorax, cylindric, with the humeral angles ill-defined; legs stoutish and not particularly long, anterior coxæ feebly separated, the femora rather strongly fusiform, the posterior femora decidedly shorter than the hind body; first joint of the tarsi nearly twice as long as second, third moderately sunk in the second (the portion visible being distinctly bi-lobed); the tooth on the claws near the middle and not very large; pygidium rather narrow and elongate; metasternum short (scarcely longer than in Brachytarsus); mesosternal process vertical, bent backwards at its extremity.

T. B.

Mauia satelles, n. sp.—Cylindrata; rufa; pube cinerea confuse vestita; antennis capite prothoraceque conjunctis vix brevioribus; prothorace transverso; postice leviter antice fortiter angustato, margine anteriori rotundatim producto, angulis posticis leviter obtusis; elytris sat elongatis, prothorace haud latioribus, punctato-striatis, interstitiis crebrius punctatis convexis, humeris obscuris. Long. 4 m.m.

A single specimen (the sex of which I am unable to determine) was obtained by beating branches of trees near Wailuku, Maui, not very much above sea-level.

T. B.

Fam. CERAMBYCIDÆ.

Clytarlus.

Clytarlus blackburni, n. sp.—Capite, thoraceque nigris, hoc dorso, illo clypeo genisque sanguineis; elytris fulvis, pone scutellum plaga magna nigricante, et post hanc, plaga communi hastata albido-setulosa, circa basin dense punctatis, lateribus lævigatis; pectore coxisque rufo-testaceis, abdomine femoribusque nigris, his basi testaceo, antennis tibiisque rufescentibus, illis basi nigro-hirsuto, tarsis posterioribus magis dilutis, pallide hirtellis. Long. 8–18 m.m.

Thorax dark red on the middle, deep black at the sides, broadly cristate along the middle, less distinctly crested on each side, the spaces between the crests bearing each a longitudinal vitta of scanty white hair; elytra broadly tawny, yellow at the sides; this colour continued to the base along the shoulder, but the shoulder external to this colour is blackish, and the yellow colour also re-appears round the scutellum, behind which the surface is blackish. This colour extends backwards along the suture, reaching the apex, but is more dilute behind. A vitta of white hairs extends from the apex along the suture, and in front becomes broader, till near the scutellum it diverges laterally on either side, so as to be furcate. The middle and hind legs are extremely elongate, their femora intensely black, incrassate, but not clavate, although they have a slender basal portion, which is yellow in colour. The tibiæ and tarsi are hirsute, and the four or five basal joints of the antennæ are much clothed with hair; that on the legs is in greater part pale in colour, but on the antennæ is black. In the male, the antennæ reach about as far back as the extremity of the elytra, but in the female are considerably shorter. In the former sex the hind body is short and curvate, and composed of five segments; but in the female it extends as far as the apex of the elytra, is semimembranous in texture, and possesses six segments. The male apparently varies much in size. Mr. Blackburn has a specimen of this sex 18 m.m. in length. The largest of the two he has sent me is 13 m.m. long.

Found in Mauna Loa, Hawaii, on a species of Acacia, at an elevation of about 6000 feet.

D. S.

Clytarlus filipes, n. sp.—Minor, subdepressus, opacus, sordide niger, albido-setosus, in elytris subfasciatus, femoribus parte basali testacea, antennis tibiis tarsisque ex parte majore fuscis, antennarum articulis basalibus ad basin, geniculisque testaceis. Long. 5½–7 m.m.

Thorax along the middle with some short transverse ridges, of which the most anterior is strongly elevated. Elytra very densely but not coarsely punctured, so as to be finely rugose; less attenuated behind than in the other species, clothed rather sparingly with pale setosity, which forms two or three broad, vague, transverse bands. Femora of hind and middle legs, with an elongate, very slender basal portion, which is pale yellow in colour; the tibiæ dark, but paler at the base, excessively slender; hind tarsi fuscous, slender, but little hirsute. The male has the antennæ considerably longer than the female, extending nearly to the apex of the elytra, and the apical part of the femora more swollen. The hind body is in each sex rather broad and flat, but is curved downwards at the extremity in the male. In the female it is rather longer. In the former sex it terminates as a large bi-lobed, or deeply-notched process, which appears to be retractile. The species is allied to C. fragilis.

Found in Hawaii on the same tree as C. blackburni; in fact, in company with it.

D. S.

APPENDIX.

MR. BLACKBURN'S *RÉSUMÉ* OF HIS JOURNEYS AND COLLECTING IN THE ARCHIPELAGO.

The Hawaiian (sometimes called the "Sandwich") Islands form an archipelago lying between 18° 55′ and 22° 15′ of north latitude, and between 154° 42′ and 160° 32′ of longitude west from Greenwich. They are thus entirely within (but close to the northern limit of) the tropical portion of the earth's surface, and are in the "new world" or "western hemisphere." The continental land nearest to them is California—distant more than 2000 miles in a north-westerly direction—and that nearest to them between the same parallels of latitude is the central portion of Mexico—considerably more distant still. The Hawaiian Islands may, therefore, be considered as among the most isolated portions of land on the earth. The names of the islands, in order of size, and excluding those which are little more than small uninhabitable rocks, are as follows:—Hawaii, Maui, Oahu, Kauai, Molokai, Lanai, Niihau, Kahoolawe.

The climate of the archipelago is remarkably equable; during a residence of nearly six years I never saw the thermometer marking a shade temperature higher than 90° F. or lower than 55°; and if the temperatures of the coldest and of the hottest week in the year were omitted the range would probably not be greater than from 65° to 85°. With the exception of a few days in the winter, of which the early mornings feel somewhat cold, the difference in temperature of the various seasons of the year is scarcely noticeable.

Concerning the rainfall it is difficult to say anything in general terms except that it is highly uncertain, varying with the locality and the character of the year. On most of the islands the eastern side has a very much larger rainfall than the western, owing, no doubt, to its receiving the trade winds from the sea and intercepting the moisture with which they are charged. I observe that in a recently published table of rainfalls at Honolulu (on the drier side of Oahu), the figures for the seven years 1874–81 are given as follows:—52·95, 39·04, 36·56, 32·30, 23·97, 51·92, 47·36 ins. On Oahu, however, the difference between the dry and wet regions is less marked than in other parts of the archipelago, owing doubtless to the less elevation of the mountains, so that the above figures would probably be roughly accurate if applied to all districts (not actually mountainous) of the island.

There is no strongly marked distinction between the dry and wet seasons of the year; certainly the rainfall during the four months, November to February,

is, on the average, about half the rainfall of the whole year,* but this is caused by the much heavier downpour during that period. In my experience the clearest and most reliable weather of the year is almost always to be expected in the intervals, sometimes of several weeks, among the winter rains; and, on the other hand, it often happens that through month after month of the summer there is scarcely a day free (especially among the mountains) from frequent drenching showers. I remember reading in one of the Honolulu newspapers a statement, either in 1881 or 1882, that there had not been a single day during a continuous period of six weeks or more, in May and June of that year, on which it had not rained at an elevation of one thousand feet on the mountains behind Honolulu; and I remember also at the time I read it feeling well satisfied that the statement was correct. On and around some of the higher mountains of Hawaii the showers are almost constant. In a table of rainfalls at various places during twelve months, 1880–81, that of Hilo (at the foot of Mauna Loa) is given as 118·03 ins., and December and February figure as the driest months there. The dry portions of the island (*i. e.* the districts lying near the western foot of ranges of high mountains) are almost devoid of vegetation and of insect life.

I have dwelt at some length on the temperature and rainfall of the island, because doubtless to the equability of the former and the variability of the latter in combination must be attributed the fact that very few species of Hawaiian insects appear to reach maturity at one season of the year rather than another, the immense majority being found at all periods. The Longicornes, especially Clytarlus, furnish almost the only instances among the Coleoptera in which I have observed a decided tendency to favour one particular season; and yet of these—though the immense majority of my specimens were taken between April and August—there are species occurring usually through those months, but which I have met with occasionally, quite freshly developed, in November, December, and January.

All the islands of the Hawaiian group (exclusive of those which are mere rocks in the sea) deserve to be called mountainous, and they all consist of two very distinct regions, viz. a low-lying and flat fringe of some few miles in width, adjacent to the coast, and a central system of mountains, forming the largest proportion of the land. The fringe of plains is in general the only part of the island that is inhabited and cultivated. It produces here and there clusters of cocoa-nut palms (though they grow far less plentifully than in the groups of islands lying south of the equator), but is more frequently treeless, or nearly so, having no natural

* This calculation is made from the few tables of rainfall available to me at the moment, and agrees with my own impression on the subject; but it must not be taken as more than an approximation, or as necessarily applicable to all parts of the islands, especially not as applicable to elevated places among the mountains, where the summer rainfall is often very large, as compared with that of the winter.

vegetation larger than cactus, a dwarf acacia, and a stunted hibiscus, of which the last-named occurs occasionally and singly (though plentiful enough on the mountains), and the former two occur singly or in combination, in patches rarely exceeding a few acres in extent. The main part of the plains between the sea and the mountains consists of an expanse of undulating grass-covered country, with a few flowering plants scattered at intervals among the grass, a species of poppy, a solanum, and a "burr," highly injurious to live stock, being the most conspicuous. These same plains, by means of irrigation from the mountains, are rapidly being brought under cultivation, and are found to yield exceedingly rich crops of sugar, rice, and other tropical products, but are almost devoid of interest to the coleopterist. They produce Adelocera modesta, M'L. (in stems of cactus), Epitragus diremptus, Karsch.; Platydema obscurum, Sh.; Hopatrum seriatum, Boisd.; and Heterophaga pandanicola, Esch. (the last four under stones), in some numbers; and there are certain additional species (*e. g.* Cyllene crinicornis, Chev.) apparently introduced with some of the numerous exotic trees and plants that are rapidly multiplying under the influence of irrigation. On the immediate fringe of the sea, and in salt-marshes, which extend here and there a mile or more inland, some half dozen other species are to be met with; and under various circumstances of a probably accidental character, I have found on the plains some few others still, of which I know some to occur ordinarily in the mountain districts, and I suspect some to be of only very rare occurrence anywhere.

The character and height of the mountain ranges varies greatly in different islands, though they all appear to agree in being of volcanic origin. On the islands forming the northern portion of the archipelago the ranges are from 3000 to 5000 feet in altitude, and are of a somewhat peculiar form, consisting generally of an elongate and very strongly serrated ridge, or backbone, from either side of which, and at right angles to the main-line of the hills, numerous shorter ridges run out towards the plains. Between these latter are extremely deep valleys, usually supplied with a stream descending from the high land towards the sea. Many of the mountain ridges that separate one valley from another are so narrow as almost to resemble a knife-edge. I remember on one occasion making an attempt to reach, by one of these "knife-edges," a particular summit that I wished to explore in the main south-eastern range of Oahu, and going on until the ridge became so narrow that trees growing upon it had to be climbed—up on one side and down on the other—because there was not room to go round them, I was at last stopped when very near the attainment of my purpose by a tree that I was unable to climb. At the northern end of each of the two southern islands—Maui and Hawaii—there is a single mountain range of the character just described, running more or less east and west, and with an altitude some 800 or 900 feet greater than that of the highest mountains in the northern part of the archipelago.

Mountains of an entirely different character are found in the southern islands, and consist of the four giants of the archipelago—Haleakala, in the south-east of Maui, with the largest summit crater in the world; Mauna Kea, near the centre of Hawaii, with an altitude of almost 14,000 feet; Hualalei, on the west coast of the same island, with an altitude somewhat about 8000 feet; and Mauna Loa, in the south of the same island, a constantly and violently active volcano, of an altitude considerably over 13,000 feet. These four differ from the other Hawaiian mountains, inasmuch as their outline is as notably rounded and their surface as gently inclined as that of the others is the reverse. The outline of Mauna Loa, viewed from a distance, is almost a perfect example of the curve called a hyperbola, and all the three highest summits can be reached on horseback. Indeed the only difficulty about ascending them is the great length of the journey from the nearest village or settlement, involving the necessity of passing at least one, two, or even more nights at a great elevation, where the air is cold and rare, and a considerable amount of *impedimenta*, involving almost a small caravan, is required. In this respect the four higher mountains differ widely from the lower ones, most of which are extremely steep. The highest point in the south-east range of Oahu (little more than 3000 feet in altitude) baffled several of my attempts to reach it, and eventually, when I had discovered the track by which it had previously been attained, ropes for scaling some of the precipices proved to be a necessary part of my equipment; and I found similar or greater difficulties in the case of every mountain between 3000 and 5000 feet in height that I attempted on the island.

The vegetation of the mountainous districts of the islands is extremely rich, though more or less confined to certain altitudes. Up to 2000 feet above sea-level the hills are usually very stony in character, and produce little more than a scanty turf, with cactus and occasional acacia bushes, the valleys of similar elevation being often filled with dense thickets of guava. At about 2000 feet commences the forest, in which, so far as my experience extends, nearly all the Hawaiian insects are found. This forest consists of a considerable variety of trees; but in the main its composition is as follows:—ohia lehua (of the natives; Metrosideros, botanically, I believe) is the most plentiful component, a grand forest tree, of which there are several species differing in colour of foliage, the most abundant being of a rich sombre green. The "koa" of the natives (Acacia falcata of science), with its vivid shade of green, follows close in order of abundance. Next comes what the natives call "kukui" (in English "candle-nut tree"; in science Aleurites triloba), with pale, silvery foliage, and, as the preceding, a very fine forest tree. The "hau" of the natives, a species of hibiscus, is something short of being a forest tree; it grows in an absolutely impenetrable, dense, woody jungle, from six to ten feet high, with dark, shining foliage, and large yellow or red flowers. The "hau" jungle, from a little distance, has much the appearance of a mangrove swamp. Other trees, occurring in plenty, but yet not forming a

staple of the forests, are:—The "ohia ai" of the natives (Eugenia of botany), which bears a pleasant fruit resembling an apple in appearance; the palm-like pandanus (sometimes attaining a very great size); an acacia, called by the natives mamaina (I am not sure of the spelling); a magnificent dracæna (which, however, is rather local), &c., &c. Besides the above, there are giant tree-ferns, often twenty feet high, bananas, and innumerable creepers, consisting of convolvuli, yams, and especially the freycinetia (called by the natives "ieie"). This superb plant, which creeps over the tallest forest trees, resembles a palm in the arrangement of its great clusters of ribbon-like leaves, and has stalks scarcely less thick than a man's arm, with fleshy crimson flowers scarcely smaller than a man's head. On nearly all the species of forest trees there are numerous parasites; and almost every fork in the branches, where a little collection of decayed vegetable matter has formed a soil, is a hanging garden of ferns. Undergrowth in the denser parts of the forest is almost non-existent, failing to hold its own in the struggle upwards for light and air; but wherever the forest is at all open, a considerable variety of low plants may be found, among which the most conspicuous and abundant are ferns, and what I take to be a large species of the nettle tribe. The forest extends from about 2000 feet above sea level to about 6000 feet, whence it begins to thin off, entirely disappearing at about 9000 feet. Above that elevation there are only stunted bushes (species unknown to me), tufts of coarse grass, and a few other small and scattered plants. The densest region of the forest is that between 2000 and 5000 feet above sea level; and it is the partially cleared portions of this part of the forest that I have found most prolific in insect life.

The scenery of the Hawaiian Islands is, as may be supposed, exceedingly fine. Perhaps there is no part of the world where lofty mountains can be seen to greater advantage, for the principal Hawaiian peaks rise so continuously from the sea that their summits are visible from the level of their base. Consequently the æsthetic effect of their altitude is much greater than in the case of many of the chief continental mountains of the world, which seem to be hemmed in by a surrounding multitude of rivals, and of which it is generally almost impossible to get a glimpse until one is half-way between sea level and their summit. Sometimes, when I have been sailing around the apparently endless base of Haleakala, and revelling in the luxury of its loveliness, carrying my gaze slowly upwards and ever upwards through the sunshine, from the white surf beating the foot of the mountain, past the villages scattered along the shore, past the lonely forests that creep aloft from the houses, past the banks of cloud that are almost always floating against the mountain's breast, past the huge bare rocks piled up beneath the summit, and still upwards to the thin layer of snow silvering the topmost peak, and looking so unearthly cold and calm, I have compared the sight with my memory of loftier mountains still (say, Mont Blanc, as seen from Chamounix), and

felt inclined to give the palm for beauty to the Hawaiian scenery. In these landscapes, even where the higher mountains are not to be seen, there is a subtle and most fascinating charm, due I think to the peculiar brightness of the colours: the sea, often of a more vivid blue than a painter dare place upon his canvas, streaked with a broad, snow-white line of foam where the coral-reef disturbs it; the golden sand on the beach gilded with sunshine; the plains rolling backward from the shore, with their long, wind-waved grass beneath the feet and their feathery palm-branches far above the head; the many-tinted forest, spread like a glowing carpet to the topmost peak over all the hills; and the sky sometimes almost coppery in its splendour. It is perhaps an unjustifiable digression, in a memoir such as this, to wander into the subject of Hawaiian landscapes; but it may be excused for the possibility of its luring fresh explorers to the islands, who, I am sure, would carry away with them as strong an impression of the beauty of the scenery as of the interest of the fauna that finds a home in its midst.

One of the most remarkable features in Hawaiian entomology is the extreme rarity of *specimens*, in comparison of the number of *species*, the very common insects being few indeed, and the rather common ones almost none at all. As an instance of this I may mention, that all the specimens taken of that interesting brachelytron, Pachycorynus discedens, Sh., occurred in a single decaying stump near Honolulu, and that frequent search failed to produce the insect again. I could go on to mention many more similar cases of a species turning up once, and not again; not in remote localities, but in the very parts that formed my most frequent collecting ground. It is by no means an unusual thing to pass a morning collecting on the mountains (at any rate on those under 3000 feet high), and to return home with perhaps two or three specimens secured, and having seen literally nothing else except the few most abundant insects. I have frequently spent an hour or more sweeping flower-covered herbage, or beating branches of trees over an inverted white umbrella, without seeing the sign of a beetle of any kind. My experience in this matter agrees with that of previous explorers in the islands of the Pacific Ocean, many of whom allude to the extreme paucity of insect life there. In M. Fairmaire's *Essai sur les Coléoptères de la Polynésie* it is stated that M. Vesco had to devote several years to collecting in Tahite and the Marquesas Islands before he could amass a hundred species of coleoptera; and after remarking on the groups to which these hundred belong, the author adds the observation, that the Sandwich Islands produce nearly the same insects in very small quantities. Another of the explorers in the Pacific (I am unable this moment to verify the quotation) remarks that, in proceeding northwards from Australia, the islands become progressively more barren of insect life, those north of the equator being almost unworthy of the trouble of exploration. A residence of years on one of the most despised groups of islands in Polynesia has undoubtedly enabled me to show that such statements depreciate unduly the real state of the case; but it has also

satisfied me that a casual visitor might very easily spend a few days in energetic Hawaiian collecting, and have very little to show as the result.

During the period of nearly six years which I spent in the Hawaiian Islands, and in which I made the explorations that have resulted in this publication, I was able to devote but little time to the study of natural history. My duties, as chaplain to the bishop and as senior priest (and during the latter part of my residence as acting dean) of the cathedral, allowed me very little leisure for scientific pursuits; and, therefore, I think it well to complete these prefatory remarks by a sketch of the amount of exploration that I was able to make on each of the islands, in order that it may be seen how much probably remains to be discovered when an entomologist with more leisure than I enjoyed is able to take up the work of investigation. It must not be forgotten that I included in my scanty entomological labours some work on all the orders of insects, so that the coleoptera only received a share of my attention.

This account of what I did on the islands *seriatim* will give me the opportunity of a few remarks on the specialities of each, and I will take them in order of position from north to south, which is generally believed to be the order in which they enter upon their existence as separate portions of land.

Kauai and Niihau.

This, the northernmost island of the group, lies about 60 miles N.W. of Oahu, and has an area of 590 square miles. Its mountains are all grouped in the centre, the highest peak (Waialeale) having an altitude of about 5000 feet above sea level. As the island on which volcanic upheavals and disturbances have been longest unknown, and also as possessing the largest and most constantly flowing rivers, Kauai might, perhaps, be expected to have the richest coleopterous fauna. Whether such is the case, I can hardly express an opinion, as I have spent only four days there, and those in August, which I consider among the less favourable months for collecting coleoptera. I landed on the east coast, and spent two days in working southwards round the south coast, and northwards half way along the west coast, not strictly following the shore, but keeping on the plains. These plains are more thickly studded with trees than those of the other islands, but, as usual, yielded only the common and generally distributed species. From the west coast I attempted the ascent of Waialeale, an extremely steep mountain, but was stopped at about 3000 feet elevation by bad weather. Nearly all my Kauai specimens were obtained during this attempt at elevations varying from 2000 to 3000 feet above the sea. After a rapid return by the previous route to Nawiliwili (the spot where I landed on the island), I made a hurried trip northwards to some fine waterfalls on the Wailua river, but without much success in procuring coleoptera, after which I embarked for Oahu.

In the part of the forests of Kauai that I visited the ohia lehua appeared to be the strongly predominant tree. I have no doubt but that there are hundreds of species still to be discovered on this island, which, it may be remarked, was the residence of Mr. Harper Pease, who sent several fine things to the British Museum some years ago. A journey on land completely round Kauai is impracticable, owing to the rugged and precipitous nature of the north-west coast, where travellers cannot pass between the mountains and the sea.

The island Niihau, with an area of 97 square miles, lies west of Kauai, separated by a channel 15 miles wide. I obtained a fine view of it from Waialeale, though I did not land there. It has no very considerable hills, and is for the most part sandy, probably possessing a scanty fauna.

Oahu.

The area of this island is 600 square miles. It has two mountain ranges, both running more or less north and south, one of them on the southern portion of the east coast, the other on the northern portion of the west coast.

The eastern range of mountains was the scene of the greater part of my researches. The higher summits of this range have an elevation of about 3000 feet, and the vegetation of the forests is extremely varied, the ohia lehua being much less plentiful than the koa and the kukui, and, at least, five or six other trees occurring in large numbers. I find, on reference to my journal, that I spent some portion of time (varying from an hour to an occasional twelve hours) in collecting insects on the eastern side of Oahu, as nearly as possible once a fortnight on the average through the six years that I spent on the Hawaiian Islands.

The mountain range on the western side of Oahu rises to 4000 feet above the sea. I spent, in collecting there, four days in July, one day in December, one in April, and one in May, and came to the conclusion that each of the mountain ranges on Oahu has a considerable number of species peculiar to it. The western range bears the local name "Waianae Mountains."

Molokai.

This island has an area of 270 square miles. It lies S.E. of Oahu, separated by a channel about 23 miles wide. I was able to pass only a few hours on it, during which I could not reach the forest; on the plains there appeared to be only the ordinary species. As Molokai is separated from Maui by a channel hardly nine miles wide, and is not much further from Lanai, it is probable that much of its insect fauna is identical with that of the neighbouring islands—though I feel no doubt as to the existence of many species peculiar to it.

Maui.

The area of this magnificent island is 760 square miles. It lies S.E. of Molokai (which, as already stated, lies S.E. of Oahu.) It is separated from Molokai by a narrow strait, and is distant nearly 80 miles from Oahu. It consists of two masses of mountain, connected by a sandy isthmus about eight miles wide. The western mountain district consists of an irregular and very precipitous range, attaining an elevation of a little less than 6000 feet above the sea. The summits are extremely serrated and picturesque, but highly dangerous to ascend, as there are no well-defined tracks; and such tracks as there are in many places pass along the foot of sheer precipices from which stones often fall under the influence of wind and rain. I have never reached one of the highest of these summits, but have ascended about 3000 feet on several occasions, though without much entomological result; but I have no doubt this was "bad luck," and that there are many interesting insects to be found here.

The central isthmus of Maui is the only tract of low-lying land on the Hawaiian Islands that I have found profitable to work. I have spent very little time on it, but obtained several new coleoptera there, and a good many hymenoptera and lepidoptera.

The eastern end of Maui is, in my opinion, the head-quarters of the insect fauna of the archipelago. It is formed entirely by that gigantic mountain Haleakala, with an elevation of 10,000 feet above the sea, the summit being occupied by the largest crater in the world. This mighty chasm is more than 2000 feet deep, and the distance around its margin is 29 miles. Volcanic action has long been extinct. As will appear on a reference to the catalogue of Hawaiian coleoptera, an enormous proportion of the most interesting insects occurred on the slopes of Haleakala. I only once visited the actual summit of the mountain, when I passed the night in a cave about 1000 feet below the highest point, and so devoted parts of two days to the exploration of the upper regions, which did not appear to be prolific of insect life. I found there, however, three species of carabidæ (two of them represented by single specimens—one, Mauna frigida, mihi, being of the highest interest) which I have not seen elsewhere.

The following is an account of the time I spent on Maui. In October I passed four days there, during which I had little leisure for entomology, and what leisure I had was in short intervals, that only enabled me to visit the sandy isthmus and the lower slopes of the western mountains. The next visit I paid to the island was in February, when I spent fifteen days there, but during that period I was for the most part "on duty," and then only able to make short excursions to the places I had visited before. I succeeded, however, in securing five days of leisure, which I devoted to Haleakala, during which I made the ascent (mentioned above) to the summit. My third visit to Maui was in April and May, when I passed a vacation

of eighteen days there. On that occasion I landed at the western extremity, and worked my way eastwards along the south coast to the isthmus, which I then crossed; I afterwards pushed on along the north coast to Haleakala, spending five days on the mountain (until famine drove me down), but not exploring much above 5000 feet of elevation, as the supply of insects evidently fell off above that region. My fourth, and last, visit to the island was in September, when I passed five days there, three of which I devoted to Haleakala.

LANAI.

This island lies due west of Maui, from which it is separated by a channel nine miles wide. It is one of the smaller islands, having an area of only about 150 square miles. Its highest summit has an elevation of about 3400 feet, and the mountains occupy an unusually small proportion of area to the plains; moreover, the forest is here less extensive and dense than in most parts of the archipelago. I am told, however, that it is very rich in species of plants.

I spent just a week on Lanai, in the month of September, and obtained several species of extreme interest, especially Proterhinus insignis, Sh., which must be considered, I think, the finest species yet discovered of its remarkable genus. As a rule the insect fauna of the island appears to be closely related to that of Maui, but only a few of its insects seem absolutely identical with those of its neighbour; I feel compelled to regard them in general as species in course of acquiring complete isolation, and therefore incapable of being treated as mere varieties. In the few patches of forest that I explored it appeared to me that insects were more plentiful than might have been expected.

HAWAII.

Hawaii is the largest island of the archipelago, having an area of 4210 square miles. It lies almost due south of Maui, from which a channel twenty-five miles wide divides it. It is almost entirely mountainous (save a narrow strip of land around the coast), and may be described as consisting of four great masses of mountain, surrounding a lofty and rugged table-land. In the north there is a very abrupt range running east and west, not far from the coast, with an elevation of about 5500 feet. The southern side of this range is occupied by a table-land ranging from 2000 to 3000 feet above the sea, from which, somewhat north of the centre of the island, the enormous mountain Mauna Kea rises to an altitude of nearly 14,000 feet. Near the middle of the western coast lies a mountain called Hualalei, with an elevation a little above 8000 feet; and the whole southern portion is occupied by Mauna Loa, a huge volcano exceeding 13,000 feet in altitude. The central table-land, into which each of these three mountains slope on one side, has an

average elevation of about 5000 feet, and is a barren waste of lava. Mauna Loa is a violently active volcano, at an elevation of about 4000 feet. There is a crater known as "Kilauea," which has been constantly raging with molten lava as far back as memory or tradition reaches; and it has been the immemorial custom of the mountain to break forth, at intervals of a few years, in unexpected places besides, from which it discharges vast streams of molten lava that roll downwards, sometimes for many months, and change the whole aspect of the country by their devastation.

To this island I have paid two visits. In the month of February I spent seventeen days there, travelling chiefly on foot. On that occasion I landed on the north-west coast, and proceeded inland, between the northern (or Kohala) range and Mauna Kea, to a place called Waimea. I then spent a day on the southern slopes of the northern range (where I found in the main the same insects as on the rest of Hawaii), and then crossed a spur of Mauna Kea to the central table-land. From this point I made a leisurely ascent of the great mountain, sleeping a night of ascent and descent, respectively, in a hut at an elevation of about 6500 feet. Owing to the exceptional depth of the snow, my guide showed the white feather, and refused to go on at an elevation a little over 10,000 feet; but my travelling companion (Mr. J. R. Watson, a botanist) and I were not willing to be baulked; so we left the guide, and completed the ascent without him, by the light of nature and of a little old-world experience in Switzerland, &c. We got through the expedition without much anxiety or mishap worse than a few tumbles into rather unpleasant snow-drifts, an inflamed nose to Mr. Watson, and a little snow-blindness to myself. During this trip I procured very few insects; but I attribute it chiefly to "bad luck," as I am satisfied that the fine forest clothing this mountain must be the home of many fine things. On the snow-covered portion I obtained nothing but a few torpid ichneumonida, though I must admit that the intense cold interfered with entomological activity on my part.

After returning to Waimea (as I could not find a guide who would undertake the difficult journey across the central table-land), we made our way to the coast, and proceeded by sea round the north of the island, to a place called Hilo, about the centre of the east coast, whence we proceeded on foot, devoting two days to the journey, to Kilauea (the active crater of Mauna Loa). This lies at a distance of thirty miles from the sea, the mountain rising so gradually that the ascent of 4000 feet accomplished in that distance seems imperceptible; and the crater, when it is reached, appears to be a chasm in the surface of a great plain. Portions of the forest that we passed through on this journey were the densest I have ever seen. On one occasion, when we were proceeding along a narrow path that is cut among the trees, we met a wild bull; and it seemed doubtful for a short time whether he or we would retrace our footsteps. At last, however, humanity prevailed; and our antagonist turned tail and fled; but he was compelled to

retreat ignominiously before us for more than two miles before he could find a place where he could force a passage off the path into the forest.

Three days were spent in the neighbourhood of the crater, during which we ascended a thousand feet, or more, higher up the mountain; after which we spent another couple of days in walking back to Hilo, and then devoted a few days to coast exploration. The expedition to Mauna Loa yielded a considerable number of new coleoptera, but not many species of extraordinary interest; most of those taken being more or less closely allied to forms already familiar on the other islands.

After an interval of a few years, I was able to make an expedition of six days to Hawaii, where I landed in May, on the south-west coast (at the scene of Captain Cook's massacre); and this was the last expedition I made on the archipelago. From Kealakekua, my landing-place, I worked gradually upward on the western slopes of Mauna Loa to an elevation of about 6000 feet, and was moderately successful, procuring a good many of the same species that I had obtained previously on the other side of the mountain, together with a fair percentage of new things; but again I was struck with the absence of coleoptera of highly specialized character as compared with those of other islands.

In concluding these general remarks on the Hawaiian Islands, I may state that all the evidence I have on the subject goes to show that I have collected probably less than half the species of the coleoptera that occur on the archipelago.

II.

SYSTEMATIC CATALOGUE OF THE COLEOPTERA OF THE HAWAIIAN ISLANDS.

By the Rev. T. BLACKBURN and D. SHARP.

This catalogue comprises the name of each species of the order Coleoptera that has been recorded, so far as Mr. Blackburn and myself have been able to discover, as occurring in the Hawaiian Islands; it also contains such information as Mr. Blackburn is able to give at present as to habits and habitat, and frequently as to the months of the year in which the species has been met with; as regards this latter point, Mr. Blackburn has not thought it necessary to give or even to preserve minute records, on the ground, as he informs me, "that in the uniform climate and temperature for which the Hawaiian Islands are remarkable, most of the species do not apparently occur with much regularity at any particular time of the year, but appear in successive broods at irregular intervals."

Each species is recorded under the name by which it was first described, and a reference is given to the work and page of the work where the description will be found. Only such synonymy is given as is specially connected with the Oceanic fauna.

A systematic arrangement is adopted nearly in conformity with that of the great *Munich Catalogue of Coleoptera*, and the reference appended to the generic name refers also to this catalogue; as this latter reference is in pursuance of a course not usually adopted by zoologists, it is only proper that I should make a brief statement on this point.

A considerable difference of opinion prevails at present as to what course should be pursued in citing a name and reference to the genus. Some prefer to refer to the author who first described or defined the genus; while others—looking to the fact that any genus in the lapse of time undergoes great changes—consider we should quote the author who defined the genus in the sense in which the individual now writing uses it. The first of these courses is, it must be admitted, practically of little value except to bibliographers; while the second is unfortunately to a considerable extent impracticable, for the reason that a genus is made what it is at any given moment, not by actual definition, but by definition plus addition and minus subtraction. A defines a genus, say, as "Chorazus," making it to consist of ten species; B adds another five species, still calling the agregate Chorazus; C describes an allied new genus, say Dyclomus, which consists of certain insects, plus two of A's and one of B's Chorazi. E now coming to the subject finds that Chorazus, as in actual use, is not the same as it was to either A or B; while C, who

has been the last of the defining factors in its shaping, has not defined it in any way whatever. For these reasons, it has long appeared to me desirable that no rule should become fixed or conventional in reference to the use of references to generic names. In point of fact, four courses may be adopted: first, no author's name need be given when a generic name is used; and this, for many purposes, is the truest and most simple thing to do, though very unsatisfactory to amateurs of pedantry; second, the name and reference may be to the maker of the generic name—this may be used in bibliographic and synonymic works; third, the name of the last actual describer may be given: this is perhaps the best course for popular works, where brevity and utility are of predominant importance over consistency and completeness; fourth, a history of the genus and its changes may be given, and the course of events by which it has come to be what it is at the moment of writing may be sketched. This latter is the best course, but it involves more expenditure of time and labour than it is worth while to devote to the object in the present transitional state of zoological nomenclature. For the purpose of this Catalogue I have therefore adopted the method of referring to the *Munich Catalogue of Coleoptera*, which will give to the student the most accessible modern information as to the extent of the genus and such points; and when the generic name is not used in the *Munich Catalogue*, I have referred to some other work where information may be obtained.

D. S.

Fam. CARABIDÆ.

Tribe LEBIINI.

Genus I.—*Plochionus*. Mun. Cat. i. p. 147.

1. Carabus pallens, Fab. Syst. Ent. p. 244.

Ins. Maui. Imm. largely distributed in both hemispheres.

Two specimens were found by beating branches of trees on the sea-shore, near a place called Uoluolu, in April.

Genus II.—*Saronychium*, Blackb. Ent. Mo. Mag. xiv. p. 142.

2. Saronychium inconspicuum, Blackb. l. c.

Ins. Oahu. Imm. (?) not yet identified from elsewhere.

Found by sifting leaves at an elevation of about 2500 feet on Konahuanui; and also a specimen in Honolulu, probably accidentally brought down from the above locality. November and March.

Tribe Anchomenini.

Genus III.—*Metromenus*, Shp. Ent. Mo. Mag. xx. p. 217.

3. Dyscolus palmæ, Blackb. Ent. Mo. Mag. xiv. p. 147.

Ins. Oahu. Aut.

Not uncommon on the leaves of Freycinetia in this island; usually at an elevation of about 1500 feet.

4. Dyscolus mutabilis, Blackb. op. cit. p. 148.

Ins. Oahu. Aut.

Rather plentiful on the leaves of a species of the lily tribe (locally known as "silver sword"); also in stems of fern; at an elevation of 2000 feet and upwards.

5. Dyscolus caliginosus, Blackb. l. c.

Ins. Oahu. Aut.

Found occasionally in the stems of ferns and other plants, at an elevation of about 2000 feet.

6. Anchomenus muscicola, Blackb. op. cit. p. 144.

Ins. Oahu. Aut.

Common near a spring of water just below the Nouanu Pali.

7. Anchomenus corruscus, Er. Act. Ac. Cæs. Leop. xvi. 1834, supp. p. 223.

Ins. Oahu. Aut. (? extinct).

This species is said to have been found under bark in Oahu; but although this island has been the chief field of Mr. Blackburn's collecting, he has not found anything answering to the description during his six years' experience.

8. Anchomenus epicurus, Blackb. op. cit. p. 145.

Ins. Oahu. Aut.

Found at an elevation of about 2500 feet on Konahuanui on several occasions, but always in the one locality; usually rare, but once found in abundance in decaying vegetable matter.

9. Anchomenus insociabilis, Blackb. Ent. Mo. Mag. xv. p. 121.

Ins. Maui. Aut.

Unique; found on Haleakala, at an elevation of about 4000 feet, in the month of February.

10. Anchomenus erro, Blackb. l. c. (?) Syn. Platynus planus, Karsch, Berl. Ent. Zeit. xxv. p. 2.

Ins. Maui. Aut.

Rather common under stones, at an elevation of 4000 to 5000 feet, on Haleakala.

11. Anchomenus protervus, Blackb. Ent. Mo. Mag. xiv. p. 145.

Ins. Oahu. Aut.
Found in various localities on the mountains of Oahu, but not commonly, under the bark of trees.

12. Anchomenus meticulosus, Blackb. op. cit. p. 146.

Ins. Oahu. Aut.
Under the bark of trees on the mountains; not common.

13. Anchomenus fossipennis, Blackb. l. c.

Ins. Oahu. Aut.
Not rare; generally occurs in company with Dyscolus mutabilis.

14. Anchomenus oceanicus, Blackb. l. c.

Ins. Oahu. Aut.
Unique; among moss, Nuuanu Pali, November.

15. Anchomenus bardus, Blackb. l. c.

Ins. Oahu. Aut.
Rare; found on the mountains at an elevation of about 2000 feet.

16. Anchomenus fugitivus, Blackb. op. cit. p. 147.

Ins. Oahu. Aut.
Rare; found at an elevation of about 2000 feet on the mountains.

17. Anchomenus cuneipennis, Blackb. op. cit. p. 146.

Ins. Oahu. Aut.
Found running on marshy ground at an elevation of about 1000 feet; not very rare.

18. Anchomenus scrupulosus, Blackb. op. cit. p. 145.

Ins. Oahu. Aut.
Unique; found under bark at an elevation of about 1500 feet.

19. Anchomenus fraternus, Blackb. l. c.

Ins. Oahu. Aut.
Not rare; under bark of trees at an elevation of about 2000 feet.

20. Anchomenus putealis, Blackb. Ent. Mo. Mag. xvii. p. 227.

Ins. Maui. Aut.
Found in rotten leaves on the margin of a stagnant pool, at an elevation of about 4000 feet on Haleakala. May.

21. Anchomenus mysticus, Blackb. Ent. Mo. Mag. xiv. p. 147.

Ins. Oahu. Aut.

Under stones, &c., at an elevation of about 2000 feet on the Waianae mountains. July. Very local, but not rare.

Genus IV.—*Colpodiscus*, Shp. Ent. Mo. Mag. xx. p. 217.

22. Anchomenus lucipetens, Blackb. op. cit. xvi. p. 105.

Ins. Hawaii. Aut.

In vegetable refuse; and also flying by night, at an elevation of about 2000 feet, on Oolaa.

23. Dyscolus tantalus, Blackb. op. cit. xiv. p. 147.

Ins. Oahu. Aut.

On the leaves of palm and other trees, on the mountains; not rare.

Genus V.—*Barypristus*, Shp. Op. cit. xx. p. 217.

24. Anchomenus incendiarius, Blackb. op. cit. xvi. p. 105.

Ins. Hawaii. Aut.

A small colony of specimens occurred under bark of Acacia falcata, at an elevation of about 4000 feet, on Mauna Loa.

25. Anchomenus rupicola, Blackb. op. cit. xv. p. 122.

Ins. Maui. Aut.

A few examples were found under stones, at an elevation of about 9000 feet, on Haleakala, in February.

26. Anchomenus sharpi, Blackb. l. c. (?) Syn. Colpodes octo-ocellatus Karsch, Berl. Ent. Zeit. xxv. p. 3.

Ins. Maui. Aut.

Not very rare under stones, at an elevation of 4000 to 5000 feet, on Haleakala.

Genus VI.—*Blackburnia*, Shp. Ent. Mo. Mag. xiv. p. 179.

27. Blackburnia insignis, Shp. l. c.

Ins. Oahu, Aut.

Under stones on the Waianae mountains, at an elevation of about 2500 feet; not rare, but very local. July.

28. Blackburnia blaptoides, Blackb. op. cit. xv. p. 157.

Ins. Oahu. Aut.

Unique; found under a stone at an elevation of about 1500 feet.

29. Blackburnia frigida, Blackb. l. c.

Ins. Maui. Aut.

Unique; found under a stone on Haleakala, at an elevation of about 10,000 feet, in the month of February.

Genus VII.—*Disenochus*, Blackb. Ent. Mo. Mag. xv. p. 121.

30. Disenochus anomalus, Blackb. l. c.

Ins. Maui. Aut.

Two specimens, under stones on Haleakala, at an elevation of about 4000 feet, in February.

31. Disenochus terebratus, Blackb. Ent. Mo. Mag. xvii. p. 227 (1st March, 1881). (?) Syn. Promecoderus fossulatus, Karsch, Berl. Ent. Zeit. xxv. p. 4 (April or May, 1881).

Ins. Maui, Aut.

Several specimens occurred in the month of May, at an elevation of about 4000 feet, under stones on Haleakala.

Genus VIII.—*Atrachycnemis*, Blackb. Ent. Mo. Mag. xv. p. 120.

32. Atrachycnemis sharpi, Blackb. l. c. p. 120. (?) Syn. Anisodactylus cuneatus, Karsch, Berl. Ent. Zeit. xxv. p. 3, pl. i. f. 4.

Ins. Maui. Aut.

Rare; under stones, at an elevation of about 4000 feet, on Haleakala. February, April, May.

Genus IX.—*Cyclothorax*, Macleay, Trans. Ent. Soc. N. S. W. II. 1873, p. 104.

33. Cyclothorax montivagus, Blackb. op. cit. p. 122. (?) Syn. Olisthopus insularis, Karsch, Berl. Ent. Zeit. xxv. p. 1.

Ins. Maui, Hawaii. Aut.

One of the commoner species of the genus; found, at an elevation of about 4000 feet, under stones.

34. Cyclothorax pele, Blackb. op. cit. p. 107.

Ins. Hawaii. Aut.

Not common; occurs under stones near the crater called Kilauea of the active volcano Mauna Loa, at an elevation of about 4000 feet. February.

35. Cyclothorax micans, Blackb. op. cit. xv. p. 122.

Ins. Maui. Aut.

Two specimens were found in moss, at an elevation of 9000 feet, on Haleakala. February.

36. Cyclothorax multipunctatus, Blackb. l. c.

Ins. Maui. Aut.

Very rare; but has occurred several times, at an elevation of about 4000 feet, on Haleakala.

37. Cyclothorax brevis, Blackb. op. cit. p. 123.

Ins. Oahu. Aut.
Not very rare ; amongst decaying leaves at an elevation of about 2000 feet.

38. Cyclothorax robustus, Blackb. op. cit. xvii. p. 228.

Ins. Maui. Aut.
Unique ; found in moss at an elevation of about 4000 feet, on Haleakala, in the month of May.

39. Cyclothorax oahuensis, Blackb. op. cit. xv. p. 123.

Ins. Oahu. Aut.
In the mountains ; very rare.

40. Cyclothorax simiolus, Blackb. l. c.

Ins. Oahu. Aut.
This is, in Oahu, the most common of the species of Cyclothorax, and is found on the mountains.

41. Cyclothorax obscuricolor, Blackb. l. c.

Ins. Maui. Aut.
Found on Haleakala, at an elevation of about 4000 feet, in February and May ; rare.

42. Cyclothorax bembidioides, Blackb. op. cit. xvi. p. 107.

Ins. Hawaii. Aut.
Unique ; the specimen was found near the crater "Kilauea" on Mauna Loa, at an elevation of about 4000 feet, in February.

43. Cyclothorax paradoxus, Blackb. op. cit. xvi. p. 108.

Ins. Hawaii. Aut.
Unique ; occurred on Mauna Kea, at an elevation of about 3000 feet, in February.

44. Cyclothorax scaritoides, Blackb. op. cit. xv. p. 156. (?) Syn. Oopterus plicaticollis, Karsch, Berl. Ent. Zeit. xxv. p. 1.

Ins. Maui. Aut.
Common on Haleakala, at an elevation between 4000 and 5000 feet.

45. Cyclothorax cordaticollis, Blackb. l. c. (?) Syn. Acupalpus biseriatus, Karsch, Berl. Ent. Zeit. xxv. p. 2.

Ins. Maui. Aut.
Not rare on Haleakala, at an elevation of about 4000 to 5000 feet.

46. Cyclothorax deverilli, Blackb. op. cit. xvi. p. 108.

Ins. Hawaii. Aut.
Found in various localities on this island, always singly, generally under bark of trees, at an elevation of 3000 to 4000 feet.

47. Cyclothorax vulcanus, Blackb. l. c.

Ins. Hawaii. Aut.

A few specimens occurred on Mauna Loa, at an elevation of 4000 feet, near the active crater Kilauea, under the bark of a tree, in February.

48. Cyclothorax unctus, Blackb. op. cit. xvii. p. 227.

Ins. Maui. Aut.

Found in rotten leaves on the margins of a stagnant pool, at an elevation of about 4000 feet, on Haleakala, in May.

49. Cyclothorax lætus, Blackb. op. cit. p. 228.

Ins. Maui. Aut.

Found on Haleakala, under stones, at an elevation of about 4000 feet, in May. Very rare.

50. Cyclothorax angusticollis, Blackb. op. cit. xv. p. 156.

Ins. Maui. Aut.

Rare ; found on Haleakala, at an elevation of about 4000 feet.

51. Cyclothorax rupicola, Blackb. l. c.

Ins. Maui. Aut.

Unique ; found under a stone, at an elevation of about 10,000 feet, on Haleakala, in February.

52. Cyclothorax inæqualis, Blackb. op. cit. p. 157.

Ins. Maui. Aut.

Found on Haleakala by sifting leaves, at an elevation of 4000 to 5000 feet, in February. Not very rare.

53. Cyclothorax karschi, Blackb. op. cit. xix. p. 62.

Ins. Hawaii. Aut.

Unique ; found under a stone, on Mauna Loa, at an elevation of about 6000 feet, in May.

Tribe BEMBIDIINI.

Genus X. *Tachys*. Mun. Cat. I. p. 401.

54. Tachys oahuensis, Blackb. Ent. Mo. Mag. xv. p. 158.

Ins. Oahu. (?) Imm. or int.

Not uncommon on salt marshes near the sea.

55. Tachys arcanicola, Blackb. l. c.

Ins. Oahu. (?) Imm.

Very local ; but not rare, under bark in some mountain localities, at an elevation of about 1500 feet.

56. Tachys atomus, Blackb. l. c.

Ins. Oahu. (?) Imm. or aut.

Not rare ; in moss in mountain localities, at an elevation of about 1500 feet.

57. Tachys mucescens, Blackb. l. c.

Ins. Oahu. (?) Int.

Unique; in decaying vegetable matter on the plains of Honolulu.

Genus XI.—*Bembidium.* Mun. Cat. i. p. 405 (*sub nom.* Bembicidium).

58. Bembidium teres, Blackb. op. cit. xvii. p. 229.

Inns. Maui. (?) Imm.

Among decaying leaves, at an elevation of about 4000 feet, on Haleakala, in May. Rare.

59. Bembidium pacificum, Blackb. op. cit. xv. p. 157.

Ins. Oahu. (?) Imm.

Not rare, but very local, though found in several localities; it generally occurs running on damp ground.

60. Bembidium ignicola, Blackb. op. cit. xvi. p. 109.

Ins. Hawaii. (?) Imm.

Unique; found in a hot steam crack, beside the crater Kilauea on Mauna Loa, at an elevation of about 4000 feet, in February.

61. Bembidium spurcum, Blackb. op. cit. xvii. p. 228.

Ins. Maui. (?) Imm.

Unique; the specimen was found in decaying leaves, at an elevation of about 4000 feet, on Haleakala, in May.

Fam. DYTISCIDÆ.

Tribe Colymbetini.

Genus XII.—*Rhantus*, Mun. Cat. ii. p. 448.

62. Colymbetes pacificus, Boisd. Voy. Astr. Ent. ii. p. 50.

Ins. Hawaii, Maui, Lanai, Oahu, Kaui. (?) Imm.

This insect occurs not rarely on all the islands visited, generally at an elevation of 1000 to 4000 feet.

Genus XIII.—*Copelatus*, Shp. Trans. Roy. Dub. Soc. Vol. ii. 1882, p. 562.

63. Colymbetes parvulus, Boisd. l. c.

Ins. Oahu, Maui. (?) Imm.

Not rare; probably occurs on the other islands; generally found in company with Colymbetes pacificus.

64. Copelatus mauiensis, Blackb., *ante*, p. 120.

Ins. Maui. (?) Imm.

Unique; taken by sifting damp leaves round a small pool of water at an elevation of about 5000 feet, on Haleakala. May.

Fam. HYDROPHILIDÆ.

Genus XIV.—*Hydrobius.* Mun. Cat. II. p. 479.

65. Hydrophilus semicylindricus, Esch. Ent. p. 41.

Ins. Hawaii, Maui, Lanai, Oahu, Kaui. (?) Imm.
Plentiful on all the islands, at various elevations, in both stagnant and running waters.

Genus XV.—*Cyclonotum et Dactylosternum.* Mun. Cat. II. p. 495.

66. Cyclonotum subquadratum, Fairm. Rev. Zool. 1849, p. 412.

Ins. Oahu. (?) Imm. or int. Tahiti.
In decaying vegetable matter, on the mountains; probably not confined to this island.

67. Sphæridium abdominale, Fab. Syst. El. I. p. 94.

Ins. Oahu, Maui. Int. Widely distributed.
Rather plentiful in decaying vegetable matter at various elevations, and probably occurs on the other islands.

Genus XVI.—*Omicrus.* Shp. Trans. Ent. Soc. Lond. 1879, p. 81.

68. Omicrus brevipes, Shp. l. c.

Ins. Oahu. (?) Imm.
Occurs rarely at various elevations; generally in damp rotting wood.

Fam. STAPHYLINIDÆ.

Tribe ALEOCHARINI.

Genus XVII.—*Stenagria.* Shp. Biol. Cent. Am. Col. I. Pt. 2, p. 237.

69. Falagria currax, Shp. Trans. Ent. Soc. Lond. 1880, p. 37.

Ins. Oahu. (?) Int.
Rare; only taken on one occasion. It was found under some logs of wood, at Honolulu.

Genus XVIII.—*Bolitochara.* Mun. Cat. II. p. 504.

70. Bolitochara impacta, Blackb., *ante*, p. 120.

Ins. Oahu. (?) Int.
Unique: on the shore near Honolulu.

Genus XIX.—*Tachyusa.* Mun. Cat. II. p. 524.

71. Tachyusa pumila, Shp. Trans. Ent. Soc. Lond. 1880, p. 38.

Ins. Maui. (?) Imm.
Two specimens were found on muddy sand, about high-water line, at Kahului bay, in February.

Genus XX.—*Homalota.* Mun. Cat. II. p. 530.

72. Homalota coriaria, Kr. Ins. Deutsch. ii. p. 282.

Ins. Hawaii, Maui, Lanai, Oahu, Kaui. Int. Widely distributed out of the islands.
Common in various localities on all the islands of the Hawaiian group.

Genus XXI.—*Diestota.* Muls. Rey. Op. Ent. XIV. p. 194.

73. Diestota plana, Shp. Trans. Ent. Soc. Lond. 1880, p. 38.

Ins. Oahu. Aut.
Occurs rarely on Freycinetia flowers on the mountains near Honolulu.
The expression "in the flowers of palm trees" in my original notes on this species (quoted by Dr Sharp, loc. cit) must be corrected, as the Freycinetia is not a palm.

74. Diestota parva, Shp. op. cit. p. 39.

Ins. Oahu. Aut.
Mountains of Oahu. In decaying wood; not common.

75. Diestota latifrons, Shp. op. cit. p. 40.

Ins. Kauai. Aut.
On flowers of Freycinetia, about 3000 feet above sea level. August.

76. Diestota rufescens, Shp. op. cit. p. 42.

Ins. Kauai. Aut.
Found on Freycinetia in the mountain forests. August.

77. Diestota palpalis, Shp. op. cit. p. 40.

Ins. Hawaii. Aut.
Several specimens were taken in February at an elevation of about 4000 feet, near the active crater "Kilauea." Unfortunately the record of this species has been lost, but it is believed that it was found on flowers of Freycinetia.

78. Diestota puncticeps, Shp. op. cit. p. 41.

Ins. Oahu. Aut.
Found on Freycinetia, in the mountain forests.

79. Diestota carinata, Shp. l. c.

Ins. Oahu. Aut.
Taken by beating branches of trees, at an elevation of about 2000 feet.

80. Diestota montana, Blackb., *ante*, p. 121.

Ins. Hawaii. Aut.
Unique; occurred on the mountains at an elevation of about 3000 feet. February.

81. Diestota incognita, Blackb., *ante*, p. 121.

Ins. Hawaii. Aut.
Unique.

Genus XXII.—*Phlœopora.* Mun. Cat. II. p. 545.

82. Phlœopora cingulata, Shp. Trans. Ent. Soc. Lond. 1880, p. 44.

Ins. Oahu. (?) Imm.
Under bark of a tree, near Honolulu.

83. Phlœopora diluta, Shp. l. c.

Ins. Kauai. (?) Imm.
In decaying wood on the mountains. August.

Genus XXIII.—*Oligota.* Mun. Cat. II. p. 547.

84. Oligota glabra, Shp. Trans. Ent. Soc. Lond. 1880, p. 46.

Ins. Hawaii. Aut.
This insect occurs in various localities, apparently in dry dead wood. It has not been found at a lower elevation than 3000 feet above the sea.

85. Oligota polita, Shp. op. cit. p. 45.

Ins. Oahu. Aut.
This species was taken singly on several occasions on flowers (generally of Freycinetia), at elevations varying from 2000 to 3000 feet above the sea.

86. Oligota mutanda, Shp. op. cit. p. 46.

Ins. Hawaii. Aut.
Two specimens of this species were obtained by beating the branches of a tree on Mauna Loa, at an elevation of about 4000 feet. Although the tree from which they were beaten was living, it is probable that it contained dead twigs, which were the actual habitat.

87. Oligota prolixa, Shp., *ante*, p. 124.

Ins. Maui, Hawaii. Aut.
Rare; occurs in bark of trees on the islands Maui and Hawaii.

88. Oligota kauiensis, Blackb., *ante*, p. 122.

Ins. Kauai. Aut.
A single specimen was taken by beating dead branches of trees, at an elevation of about 2000 feet on Waialeale, Kauai. August.

89. Oligota longipennis, Blackb., *ante*, p. 123.

Ins. Oahu. Aut.
Unique.

90. Oligota simulans, Blackb., *ante*, p. 123.

Ins. Kauai. Aut.
A single specimen was taken by beating dead branches of trees, at an elevation of about 2000 feet on Waialeale, Kauai. August.

91. Oligota variegata, Blackb., *ante*, p. 124.

Ins. Oahu. Aut.
Unique.

92. Oligota clavicornis, Shp. Trans. Ent. Soc. Lond. 1880, I. p. 44.

Ins. Oahu. (?) Int.
Twice found in straw, in the city of Honolulu. In both cases the straw had been imported from England.

Genus XXIV.—*Liophœna.* Shp. Trans. Ent. Soc. Lond. 1880, p. 48.

93. Liophæna gracilipes, Shp. op. cit. p. 47.

Ins. Hawaii. Aut.
This species is connected with dead branches of trees. It occurs on Mauna Loa, near the active crater "Kalauea;" elevation about 4000 feet.

94. Liophæna flaviceps, Shp. l. c.

Ins. Hawaii. Aut.
Occurs in the same locality as L. gracilipes, Shp.

Genus XXV.—*Myllæna.* Mun. Cat. II. p. 550.

95. Myllæna familiaris, Shp. op. cit. p. 48.

Ins. Oahu. (?) Imm.
Not rare in the mountain forests around Honolulu. Generally obtained by beating miscellaneous trees and flowers.

96. Myllæna curtipes, Shp. op. cit. p. 49.

Ins. Oahu. (?) Imm.
This insect occurred, on a single occasion, in some numbers, in a heap of refuse at an elevation of about 3000 feet on Konahuanui.

97. Myllæna vicina, Shp. op. cit. p. 48.

Ins. Maui. (?) Imm.
The exact record of circumstances of capture has been lost, but the locality was certainly on Maui, and probably in the Wailuku valley.

98. Myllæna discedens, Shp. op. cit. p. 49.

Ins. Oahu. (?) Imm.
This species occurs very rarely (single specimens were taken twice, as the result of frequent search), under damp decaying logs of wood, on the low hills within a few miles of Honolulu.

99. Myllæna pacifica, Blackb., *ante*, p. 121.

Ins. Hawaii. (?) Imm.
Unique; occurred on Freycinetia, on Mauna Loa, at an elevation of about 4000 feet. February.

100. Myllæna oahuensis, Blackb., *ante*, p. 122.

Ins. Oahu. (?) Imm.
Probably beaten from flowers in the mountain forests near Honolulu.

Tribe XANTHOLININI.

Genus XXVI.—*Pachycorynus.* Mun. Cat. II. p. 595.

101. Pachycorynus discedens, Shp. Trans. Ent. Soc. Lond. 1880, I. p. 50.

Ins. Oahu. (?) Int. or imm.

Under bark, in a forest about three miles from Honolulu, at an elevation of about 2000 feet. A small series was taken once; all efforts to procure the species again were unavailing.

Genus XXVII.—*Leptacinus.* Mun. Cat. II. p. 605.

102. Leptacinus flavipennis, Kr. Wieg. Arch. 1859, p. 111.

Ins. Oahu. Int. Ceylon.

Single specimens were taken on three separate occasions in the city of Honolulu. Probably widely distributed in Eastern Asia.

Tribe STAPHYLININI.

Genus XXVIII.—*Creophilus.* Mun. Cat. II. p. 575.

103. Staphylinus maxillosus, L.

Ins. Hawaii, Maui, Lanai, Oahu, Kauai. Int. Widely distributed.

Plentiful in decaying carcasses all over the Hawaiian Islands.

Genus XXIX.—*Cafius.* Fauvel, Faune, Gal. rheu. III. p. 421.

104. Philonthus naticus, Fairm. Rev. Zool. 1849, p. 288.

Ins. Maui. (?) Imm. Tahiti.

Two specimens occurred in decaying seaweed on the coast of Maui, near Haiku. March.

Genus XXX.—*Philonthus.* Mun. Cat. II. p. 584.

105. Philonthus scybalarius, Nord. Symb. p. 94.

Ins. Hawaii, Maui, Lanai, Oahu, Kauai. Int. Widely distributed.

Plentiful on all the islands, but rarely occurring at a lower elevation than 1500 feet above the sea.

106. Staphylinus discoideus, Gr. Micr. p. 38.

Ins Oahu. Int. Europe.

Common on Oahu (and probably on others of the Hawaiian Islands), generally in decaying vegetable matter.

107. Philonthus turbidus, Er. Gen. et Spec. p. 466.

Ins. Oahu. Int. Madagascar, Egypt, Natal, Canary Islands.

In Honolulu it has been found not uncommonly flying to a light in the evening.

108. Staphylinus nigritulus, Gr. Micr. p. 41.

Ins. Maui, Lanai, Hawaii. Int. Widely distributed.

Occasionally taken on Maui, Lanai, and Hawaii; generally under stones, on the mountains, at elevations varying from 2000 to 4000 feet above the sea.

Tribe Pæderini.

Genus XXXI.—*Lithocharis.* Mun. Cat. II. p. 620.

109. Lithocharis debilicornis, Woll. Cat. Col. Mad. p. 194.

Ins. Oahu. Int. Widely distributed.

A small batch of this species occurred in Honolulu.

110. Lithocharis celebensis, Fauvel, in litt.

Ins. Oahu. Int. Celebes.

In vegetable refuse near the beach, Honolulu.

111. Lithocharis incompta, Shp., *ante*, p. 124.

Ins. Hawaii. (?) Imm.

Rare. A few specimens occurred in Freycinetia flowers, at an elevation of about 4000 feet, on Mauna Loa. February.

112. Lithocharis fuscipennis (? Kr.) Fauv. Ann. Mus. Gen. XII. p. 229.

Ins. Oahu, (?) Int. Ceylon, Celebes, China.

Honolulu. This is, I believe, the same species as that recorded by Fauvel, l. c., as being the L. fuscipennis, Kr., but I think Mr. Fauvel's determination is clearly an erroneous one, and the species probably undescribed.

Tribe Oxytelini.

Genus XXXII.—*Oxytelus.* Mun. Cat. II. p. 648.

113. Oxytelus Bledioides, Blackb., *ante*, p. 125.

Ins. Oahu. (?) Int.

Unique. Honolulu. Occurred in September.

114. Oxytelus advena, Shp. Trans. Ent. Soc. Lond. 1880, p. 50.

Ins. Oahu. (?) Int.

In various localities on Oahu. Generally in decaying vegetable matter.

115. Oxytelus pygmæus, Kr. Wieg. Arch. 1859, p. 176.

Ins. Oahu. Int. Ceylon.

Honolulu. In decaying vegetable matter. Not common.

Genus XXXIII.—*Trogophlœus.* Mun. Cat. II. p. 652.

116. Trogophlœus senilis, Shp. Trans. Ent. Soc. Lond. 1880, p. 51.

Ins. Oahu. (?) Imm.
Rather frequently to be met with on the margin of water, on Oahu; generally at a considerabl elevation above the sea.

117. Trogophlœus abdominalis, Shp. op. cit. p. 52.

Ins. Oahu. (?) Imm.
Not uncommon in the salt marshes on the coasts of Oahu.

118. Trogophlœus fontinalis, Shp. l. c.

Ins. Oahu. (?) Imm.
Occurs on the margins of running water on the mountains.

Tribe PIESTINI.

Genus XXXIV.—*Lispinodes.* Shp. Trans. Ent. Soc. Lond. 1880, p. 53.

119. Lispinodes explicandus, Shp. l. c.

Ins. Oahu. (?) Imm.
Found rarely, under bark of trees, on the higher mountains.

120. Lispinodes quadratus, Blackb., *ante*, p. 125.

Ins. Oahu. (?) Imm. or int.
A single example was found under the bark of a tree near Honolulu.

121. Lispinodes pallescens, Blackb., *ante*, p. 126.

Ins. Oahu. (?) Imm. or int.
A single example was taken under bark of a tree near Honolulu.

Genus XXXV.—*Glyptoma.* Mun. Cat. II. p. 677.

122. Glyptoma blackburni, Shp. Trans. Ent. Soc. Lond. 1880, p. 53.

Ins. Hawaii, Oahu, Kauai. (?) Imm.
Under bark of trees on the mountains of Kauai, Oahu, and Hawaii; probably occurs on all the islands of the group.

123. Glyptoma brevipenne, Shp. l. c.

Ins. Oahu. (?) Imm.
Occurs rarely, under bark of trees, on the mountains.

Fam. TRICHOPTERYGIDÆ.

Genus XXXVI.—*Actidium.* Matth. Trichop. p. 86.

124. Actidium sharpianum, Matt. Cist. Ent. II. p. 39.

Ins. Oahu. (?) Imm.
Under bark of trees in mountain forests.

Genus XXXVII.—*Ptiliodes.* Matth. Cist. Ent. III. p. 40.

125. Ptiliodes blackburni, Matt. op. cit. p. 41.

Ins. Oahu. (?) Imm.
Under bark of trees in mountain forests.

Genus XXXVIII.—*Ptinella.* Mun. Cat. II. p. 745.

126. Ptinella pacifica, Matt. Cist. Ent. III. p. 42.

Ins. Oahu (?) Imm.
Under bark of trees in mountain forests.

Fam. HISTERIDÆ.

Genus XXXIX.—*Carcinops.* Mun. Cat. III. p. 776.

127. Dendrophilus 14-striatus, Steph. Ill. Brit. Ent. v. p. 412.

Ins. Oahu. Int. Widely distributed.
Not rare in the city of Honolulu, and probably elsewhere.

Genus XL.—*Saprinus.* Mun. Cat. III. p. 782.

128. Saprinus lugens, Er. Jahr. 1834, p. 181.

Ins. Hawaii, Maui, Lanai, Oahu, Kauai. Int. Mexico, California.
Plentiful in decaying carcasses all over the Hawaiian islands.

129. Saprinus oregonensis, Lec. Mon. p. 45.

Ins. Oahu. (?) Hawaii, Maui, Lanai, Kauai. Int. California.
Generally found in company with S. lugens.

Genus XLI.—*Bacanius.* Mun. Cat. III. p. 796.

130. Bacanius atomarius, Shp., *ante*, p. 128.

Ins. Oahu. (?) Int.
Honolulu.

131. Bacanius confusus, Blackb., *ante*, p. 129.

Ins. Oahu. (?) Int.
Unique; without special locality.

Genus XLII.—*Acritus.* Mun. Cat. III. p. 797.

132. Acritus insularis, Shp., *ante*, p. 129.

Ins. Oahu. (?) Int.
Mountains near Honolulu.

Genus XLIII.—*Aeletes.* Horn, Proc. Am. Phil. Soc. XIII. p. 312.

133. Acritus basalis, Lec. Ann. Lyc. v. p. 170.

Ins. Oahu. (?) Imm.
A few specimens have been taken in several mountain localities on Oahu.

134. Aeletes facilis, Shp., *ante*, p. 130.

Ins. Oahu. (?) Imm.

135. Aeletes longipes, Shp., *ante*, p. 129.

Ins. Oahu, Maui, Lanai. (?) Imm.
A few specimens occurred on Mauna Loa, Hawaii, in decaying wood, at an elevation of between 4000 and 5000 feet. In somewhat similar localities (though at a lower elevation) on Maui and Lana specimens have occurred somewhat smaller, but apparently referable to this species.

136. Aeletes concentricus, Shp., *ante*, p. 130.

Ins. Maui. (?) Imm.
Rare; occurs in wood at an elevation of about 4000 feet on Haleakala, Maui.

137. Aeletes monticola, Blackb., *ante*, p. 130.

Ins. Maui. (?) Imm.
Unique; occurred in decaying wood on Haleakala. April.

138. Aeletes flavitarsis, Lewis, Ent. Mo. Mag. XVI. p. 79.

Ins. Oahu. (?) Imm.
Occasionally taken on the higher mountains of Oahu, generally in decaying wood.

Fam. NITIDULIDÆ.

Genus XLIV.—*Carpophilus.* Mun. Cat. III. p. 810.

139. Carpophilus maculatus, Mur. Mon. Nitid. p. 372.

Ins. Oahu, Kaui, Maui, Hawaii. (?) Int.
Occurs abundantly on various articles of food.

140. Nitidula dimidiata, Fab. Ent. Syst. I. p. 261.

Ins. Oahu, Maui. (?) Hawaii, (?) Lanai, (?) Kauai. Int. Widely distributed.
Taken on Oahu and Maui in the greatest abundance. It attacks almost all articles of food in houses; and doubtless occurs on all the islands.

141. Dermestes hemipterus, Lin. Syst. Nat. I. 2, p. 565.

Ins. Oahu, Maui. Int. Widely distributed.
Taken on Oahu and Maui, but not commonly,

Genus XLV.—*Gonioryctus.* Shp. Trans. Ent. Soc. Lond. 1878, p. 131.

142. Gonioryctus latus, Shp. op. cit. p. 129.

Ins. Oahu. Aut.
Found on flowers (usually of the Freycinetia) in the mountain forests, at elevations of 2000 to 3000 feet above the sea; not rare.

143. Gonioryctus blackburni, Shp. op. cit. II. p. 130.

Ins. Oahu. Aut.
Taken singly on several occasions on flowers in the mountain forests.

144. Gonioryctus monticola, Shp. l. c.

Ins. Oahu. Aut.
A few specimens of this insect occurred in the decayed stems of a tree-fern, just below the summit of Konahuanui, in March.

145. Gonioryctus fugitivus, Blackb., *ante*, p. 131.

Ins. Hawaii. Aut.
Unique; taken by beating flowers near Waimea, at an elevation of about 3000 feet. February.

146. Gonioryctus similis, Blackb., *ante*, p. 131.

Ins. Oahu. Aut.
In the stems of a species of lily growing near the summit of Konahuanui.

Genus XLVI.—*Brachypeplus.* Mun. Cat. III. p. 807.

147. Brachypeplus tinctus, Shp. Trans. Ent. Soc. Lond. 1879, p. 83.

Ins. Oahu. Aut.
Three specimens occurred on flowers at an elevation of about 1500 feet.

148. Brachypeplus protinoides, Shp. op. cit. p. 85.

Ins. Maui. Aut.
Occurs commonly on flowers at an elevation of about 4000 feet on Haleakala.

149. Brachypeplus torvus, Blackb., *ante*, p. 133.

Ins. Oahu. Aut.
Unique; occurred in flowers on the Waianae mountains.

150. Brachypeplus koelensis, Blackb., *ante*, p. 133.

Ins. Lanai. Aut.
Unique; occurred near a place called Koele, on the island Lanai. September.

151. Brachypeplus bidens, Shp. Trans. Ent. Soc. Lond. 1881, p. 510.

Ins. Hawaii. Aut.
Occurs on Mauna Loa, at elevations of 4000 to 5000 feet. On flowers.

152. Brachypeplus floricola, Blackb., *ante*, p. 134.

Ins. Kaui. Aut.
Unique; obtained by beating flowers on Waialeale, at an elevation of about 2000 feet. August.

153. Brachypeplus olinda, Blackb., *ante*, p. 132.

Ins. Maui. Aut.
Unique; taken by beating flowers, near Olinda on Haleakala, at an elevation of about 4000 feet. September.

154. Brachypeplus celatus, Shp., *ante*, p. 134.

Ins. Hawaii. Aut.
Four specimens were taken by beating flowers, at an elevation of about 6000 feet on Mauna Loa.

155. Brachypeplus affinis, Shp. Trans. Ent. Soc. Lond. 1881, p. 509.

Ins. Hawaii. Aut.
Not rare on flowers on Mauna Kea, at an elevation of about 3000 feet. February.

156. Brachypeplus inauratus, Shp. op. cit. p. 508.

Ins. Hawaii. Aut.
On flowers, at an elevation of about 7000 feet, on Mauna Kea, Hawaii. February.

157. Brachypeplus apertus, Shp., *ante*, p. 135.

Ins. Hawaii. Aut.
A short series occurred on flowers, at an elevation of about 6000 feet, on Mauna Loa. May.

158. Brachypeplus quadraticollis, Blackb., *ante*, p. 135.

Ins. Hawaii. Aut.
A single specimen was taken by beating flowers, at an elevation of about 4000 feet, on Mauna Loa, Hawaii. February.

159. Brachypeplus discedens, Shp. Trans. Ent. Soc. Lond. 1878, II. p. 133.
♂ puncticeps, Shp. l. c. Var. (?) kauaiensis, Blackb., *ante*, p. 137.

Ins Oahu. Var. Ins. Kaui. Aut.
Occurs rather commonly on the flowers of various trees in the mountain forests near Honolulu—generally at an elevation above the sea of 1500 feet or more.

160. Brachypeplus metallescens, Shp. op. cit. 1881, p. 511.

Ins. Hawaii. Aut.

On flowers (especially of Freycinetia) on Mauna Kea and Mauna Loa, at elevations of 4000 to 5000 feet. February, May.

161. Brachypeplus parallelus, Blackb., *ante*, p. 135.

Ins. Lanai. Aut.

A single specimen was beaten from dead wood near a place called "Koek," at an elevation of about 2000 feet. September.

162. Brachypeplus vestitus, Shp. Trans. Ent. Soc. Lond. 1881, p. 511.

Ins. Oahu. Aut.

Occurs, not very rarely, on flowers in the forests near Honolulu, at an elevation of about 1500 feet.

163. Brachypeplus varius, Shp. op. cit. p. 512.

Ins. Hawaii. Aut.

Found on flowers, on Mauna Loa, at an elevation of about 4000 feet. February.

164. Brachypeplus blackburni, Shp. Trans. Ent. Soc. Lond. 1881, iv. p. 516.
(?) var. lanaiensis, Blackb., *ante*, p. 138.

Ins. Hawaii, Lanai (var.). Aut.

Taken by beating dead wood at an elevation of about 4000 feet on Mauna Loa, Hawaii. February. The var. (?) was taken under similar circumstances on Lanai, in September. From observation of the habits of the insect on Lanai I have little doubt that the specimens originally taken on Hawaii and recorded as occurring on flowers were in reality procured from unnoticed dead wood, around which the flowers were growing.

165. Brachypeplus robustus, Shp. Trans. Ent. Soc. Lond. 1878, p. 134.

Ins. Oahu. Aut.

Occurs near Honolulu rarely; once taken in some numbers in interstices on the bark of a tree. It has not been taken below 1500 feet above the sea.

166. Brachypeplus guttatus, Shp. Trans. Ent. Soc. Lond. 1881, p. 513.

Ins. Oahu. Aut.

Found near Honolulu, at an elevation of 1500 feet or more, and usually at exuding sap of the koa tree.

167. Brachypeplus sordidus, Shp. op. cit. p. 514.

Ins. Hawaii. Aut.

Two specimens occurred. They were taken at Kilauea, on Mauna Loa, by beating, at an elevation of about 4000 feet. February.

168. Brachypeplus expers, Blackb., *ante*, p. 136.

Ins. Maui. Aut.

A single specimen was taken on Haleakala, at an elevation of more than 4000 feet. May.

169. Brachypeplus reitteri, Shp. Trans. Ent. Soc. Lond. 1878, p. 134.

Ins. Oahu. Aut.

Frequents the stems of bananas on the mountains near Honolulu. Not at all common.

170. Brachypeplus infimus, Shp. op. cit. p. 135.

Ins. Oahu. (?) Imm.

Under the bark of trees on the mountains. Rare.

171. Brachypeplus obsoletus, Shp. op. cit. 1881, p. 515.

Ins. Hawaii. Aut.

Occurred in various mountain localities on Hawaii, but rarely, and at elevations higher than 3500 feet. Some (and probably all) of the specimens were taken in the stems of ferns. February.

172. Brachypeplus omaloides, Shp. op. cit. 1878, p. 136.

Ins. Hawaii, Oahu. Aut.

The commonest Hawaiian species of the genus. It occurs in considerable numbers on flowers in the mountain forests of Oahu, appearing to prefer the Freycinetia, on the stalks of which it may be found even when there are no flowers. It also occurs on Hawaii, and probably on other islands.

173. Brachypeplus aper, Shp. op. cit. p. 137.

Ins. Oahu. Aut.

Taken singly on several occasions under bark of trees on the mountains of Oahu.

174. Brachypeplus explanatus, Shp. op. cit. 1879, p. 84.

Ins. Oahu. Aut.

Two specimens only occurred. They were taken on the mountains near Honolulu, but the exact particulars of the capture have been lost.

175. Brachypeplus brevis, Shp. op. cit. 1878, p. 137.

Ins. Oahu. Aut.

Taken on several occasions, but only in very small numbers, by sifting dead leaves at the foot of a precipitous cliff in the mountains near Honolulu. The locality is about 1000 feet above the sea.

176. Brachypeplus spretus, Blackb., *ante*, p. 136.

Ins. Maui. Aut.

Occurs not uncommonly on dead branches of trees, at an elevation of about 4000 feet, on Haleakala.

177. Brachypeplus inæqualis, Shp. op. cit. p. 136.

Ins. Oahu. Aut.

Mountains of Oahu; generally on flowers of forest trees; rare.

178. Brachypeplus striatus, Shp. op. cit. 1881, p. 515.

Ins. Hawaii. Aut.

Occurs rather commonly in various mountain localities on Hawaii; generally at a considerable elevation (4000 feet or more). It is probably the representative on Hawaii of B. spretus on Maui, and B. impressus on Oahu.

179. Brachypeplus bicolor, Blackb., *ante*, p. 137.

Ins. Hawaii. Aut.

A single example was found under the bark of a tree on Mauna Loa, at an elevation of nearly 5000 feet.

180. Brachypeplus impressus, Shp. op. cit. 1878, p. 135.

Ins. Oahu. Aut.

Occasionally taken on flowers of trees in mountainous places near Honolulu.

Genus XLVII.—*Haptoncus.* Mun. Cat. III. p. 814.

181. Haptoncus tetragonus, Murr. Mon. Nitid. p. 401. (?) Syn. Epuræa ocularis, Fairm. Essai sur les Col. de la Polynésie, p. 28.

Ins. Hawaii, Oahu, Kauai. (?) Maui, (?) Lanai. Int. Ceylon, Tahiti (?).

Occurred not rarely in decaying vegetable matter (especially fruit), at various elevations, on Kauai, Oahu, and Hawaii, and doubtless is found on all the other islands of the Hawaiian group.

182. Haptoncus mundus, Shp. Trans. Ent. Soc. Lond. 1878, II. p. 139.

Ins. Hawaii, Oahu, Kauai, var. (?) Imm.

Has been taken on Oahu and Hawaii, not very rarely, on flowers of forest trees on the mountains; generally occurs at an elevation of 1500 to 3000 feet above the sea.

Specimens which appear to be a small dark variety of this species occurred on Kauai under similar circumstances.

Fam. MONOTOMIDÆ.

Genus XLVIII.—*Hesperobænus.* Mun. Cat. III. p. 893.

183. Rhizophagus capito, Fairm. Rev. Zool. 1850, p. 54.

Ins. Oahu, Kauai. (?) Hawaii, (?) Maui, (?) Lanai. Int. Tahiti.

Not common; occurs under bark in various localities on Kauai and Oahu, and is probably extant on the other islands.

Fam. TROGOSITIDÆ.

Genus XLIX.—*Trogosita.* Mun. Cat. III. p. 841.

184. Tenebrio mauritanicus, L. Syst. Nat. I. 2, p. 674.

Ins. Oahu. (?) Hawaii, (?) Maui, (?) Lanai, (?) Kauai. Int. Cosmopolite.

Common in Honolulu, and doubtless in other parts of the islands.

Fam. COLYDIDÆ.

Genus L.—*Antilissus.* Shp. Trans. Ent. Soc. Lond. 1879, p. 87.

185. Antilissus aper, Shp. op. cit. p. 86.

Ins. Oahu. (?) Int. or imm.

Not rare; occurs under bark in various mountain localities on Oahu, but has not been found on the other islands.

Genus LI.—*Eulachus.* Mun. Cat. III. p. 860.

186. Eulachus hispidus, Blackb., *ante*, p. 141.

Ins. Oahu. (?) Int or imm.

A single example occurred near Honolulu, at an elevation of about 1000 feet.

Fam. RHYSODIDÆ.

Genus LII.—*Clinidium.* Mun Cat. III. p. 868.

187. Rhyzodes liratus (Newm.), Chevr. Ann. Soc. Ent. Fr. 1873, p. 388.

Ins. Oahu. Int. Brazil.

"Honolulu" Chev.; unknown to us, and no doubt an accidental introduction which has not established itself.

Fam. CUCUJIDÆ.

Genus LIII.—*Cryptamorpha.* Mun. Cat. III. p. 878.

188. Psammæchus Desjardinsii, Guer. Ic. Regn. An. Ins. p. 196.

Ins. Hawaii, Kauai, Oahu; (?) Maui, (?) Lanai. Imm. Widely distributed in islands.

Doubtless on all the islands; common in various kinds of localities. Usually appears to be connected with low herbage.

Genus LIV.—*Telephanus.* Mun. Cat. III. p. 874.

189. Telephanus insularis, Shp., *ante*, p. 143.

Ins. Oahu, Kauai. (?) Imm.

Rare; has been taken on three separate occasions, and appears to find its home at the roots of grass and other herbage, on the low ground not much above sea level.

190. Telephanus pallidipennis, Blackb., *ante*, p. 144.

Ins. Oahu. (?) Imm.

Unique; obtained by sweeping low herbage in the Pauoa valley, near Honolulu.

Genus LV.—*Læmophlæus.* Mun. Cat. III. p. 874.

191. Cucujus pusillus, Schon. Syn. Ins. I. 3, p. 55.

(?) Syn. Læmophlœus brevis, Fairm. Essai sur les Col. de la Polynesie, p. 83.

Ins. Oahu. (?) Int.

Not very uncommon near Honolulu. Its home appears to be in the burrows of Apate castanoptera, Fairm.

192. Læmophlœus æneus, Shp., *ante*, p. 143.

Ins. Maui, Hawaii. (?) Imm.

Very rare. Has occurred several times, at an elevation of about 4000 to 5000 feet, on the higher mountains of Maui and Hawaii, in the crevices of bark. I rather suspect it of being connected with the burrows of Clytarlus, as I have always found them in the trees from which I have obtained this Læmophlœus.

Genus LVI.—*Brontolæmus.* Shp., *ante*, p. 142.

193. Brontolæmus elegans, Shp., *ante*, p. 142.

Ins. Oahu, Lanai, Kauai, (?) Hawaii (?) Maui (?) Imm.

Not at all common. Has been taken on Kauai, Oahu, and Lanai, running over the trunks of partially decayed trees like a longicorn. Probably occurs on all the islands.

Genus LVII.—*Monanus.* Shp. Trans Ent. Soc. Lond. 1879, p. 86.

194. Monanus crenatus, Shp. op. cit. p. 85.

Ins. Oahu. (?) Imm.

Several specimens were taken on one occasion by beating the branches of a pandanus, near the Nuanu Pali.

195. Monanus brevicornis, Blackb., *ante*, p. 143.

Ins. Oahu. (?) Imm.

A batch of three specimens occurred in the decaying flowers of a banana, in the Pauoa valley.

Genus LVIII.—*Cathartus.* Mun. Cat. p. 880.

196. Cryptophagus advena, Walt. Silb. Rev. Ent. II. p. 256.

Ins. Oahu. Int. Widely distributed.

Common in Honolulu. (?) Probably in other parts of the islands.

Genus LIX.—*Silvanus.* Mun. Cat. III. p. 878.

197. Dermestes surinamensis, L. Syst. Nat. I. 2, p. 565.

Ins. Oahu, Lanai. Int. Widely distributed.

Common on Oahu, Lanai, and (probably) on the other islands.

198. Dermestes unidentatus, Fab. Syst. El. i. p. 317.

Ins. Oahu. Int. Europe.

Only once taken; on that occasion it occurred in some numbers under the bark of some native timber lying in Honolulu.

Genus LX.—*Nausibius*. Mun. Cat. iii. p. 880.

199. Corticaria dentata, Marsh. Ent. Brit. p. 108.

Ins. Oahu. Int. Widely distributed.

Common in Honolulu, and widely distributed, doubtless over the whole group of islands wherever circumstances favour its introduction.

Fam. CRYPTOPHAGIDÆ.

Genus LXI.—*Telmatophilus*. Mun. Cat. iii. p. 881.

200. Telmatophilus debilis, Shp., *ante*, p. 145.

Ins. Oahu. (?) Imm.

At an elevation of about 2000 feet.

Genus LXII.—*Henoticus*. Th. Sk. Col. x. p. 67.

201. Crytophagus serratus, Gyll. Ins. Suec. i. p. 171.

Ins. Maui, Oahu. Int. Europe.

Rare; has occurred in small numbers on Maui and Hawaii, under bark, and flying in the evening. A single specimen, very pale in colour, taken on Oahu. May possibly be an extreme variety of this species.

Fam. LATHRIDIIDÆ.

Genus LXIII.—*Lathridius*. Mun. Cat. iii. p. 896.

202. Lathridius nodifer, Westw. Int. Class. Ins. i. p. 155.

Ins. Oahu, Hawaii. Int. Widely distributed.

Rare; has occurred under bark on Oahu and Hawaii, always at a considerable elevation above sea level.

Fam. MYCETOPHAGIDÆ.

Genus LXIV.—*Litargus*. Mun. Cat. iii. p. 908.

203. Litargus vestitus, Shp. Trans. Ent. Soc. Lond. 1879, p. 88.

Ins. Oahu, Lanai, Hawaii, (?) Maui, (?) Kanai. (?) Imm.

Doubtless occurs on all the islands. Appears to live in bark, at a considerable elevation above the sea.

Genus LXV.—*Typhæa.* Mun. Cat. III. p. 908.

204.—Dermestes fumatus, Lin. Syst. Nat. I. 2, p. 564.

Ins. Oahu. Int.
Has occurred several times in dead wood in Honolulu.

Genus LXVI.—*Mycetæa.* Mun. Cat. III. p. 910.

205. Silpha hirta, Marsh, Ent. Brit. I. p. 124.

Ins. Oahu. Int.
A single specimen was taken by beating branches of trees in the Pauoa valley, near Honolulu.

Genus LXVII.—*Propalticus.* Shp. Trans. Ent. Soc. Lond. 1879, p. 89.

206. Propalticus oculatus, Shp. op. cit. p. 88.

Ins. Oahu, Maui. (?) Imm.
This probably occurs on all the other islands. In dead wood in all kinds of localities. Not rare but very difficult to capture, on account of its extremely agile saltatory powers.

Fam. CORYLOPHIDÆ.

Genus LXVIII.—*Orthoperus.* Mun. Cat. XII. p. 3818.

207. Orthoperus æqualis, Shp., *ante*, p. 128.

Ins. Hawaii. (?) Imm.
A single specimen occurred in the debris at the foot of a decaying stump of an Acacia falcata, at an elevation of about 4000 feet or more, on Mauna Loa.

Genus LXIX.—*Serieoderus.* Mun. Cat. XII. p. 3819.

208. Sericoderus basalis, Shp., *ante*, p. 127.

Ins. Oahu. (?) Imm.
Occurs in the salt marshes, on the plains of Oahu.

209. Sericoderus pubipennis, Shp., *ante*, p. 128.

Ins. Oahu, Maui. (?) Imm.
Various mountain localities, on Oahu and Maui.

Genus LXX.—*Corylophus.* Mun. Cat. XII. p. 3820.

210. Corylophus rotundus, Shp., *ante*, p. 127.

Ins. Oahu. Imm. or int.
Honolulu.

211. Corylophus suturalis, Shp., *ante*, p. 127.

Ins. Oahu. (?) Imm.

Occurs at roots of grass on the Nuuanu Pali, at an elevation of about 2000 feet above the sea leve

Fam. EROTYLIDÆ.

Genus LXXI.—*Euxestus.* Mun. Cat. XII. p. 3686.

212. Euxestus minor, Shp., *ante*, p. 145.

Ins. Oahu. (?) Imm.

In or under decaying wood (especially when it is attacked by mould or fungus), at various localities and various elevations above sea level, on Oahu.

Genus LXXII.—*Eidoreus.* Shp., *ante*, p. 146.

213. Eidoreus minutus, Shp., *ante*, p. 146.

Ins. Oahu. (?) Imm.

Fam. COCCINELLIDÆ.

Genus LXXIII.—*Neda.* Mun. Cat. III. p. 3769.

214. Coccinella abdominalis, Say. Proc. Ac. Phil. IV. 1824, p. 95.

Ins. Maui, Oahu, Kauai; (?) Hawaii, (?) Lanai. Int. North America, Mexico.

Common in various localities.

Genus LXXIV.—*Coccinella.* Mun. Cat. XII. p. 3748.

215. Sp. dub.

Ins. Oahu. Int.

N. B.—I have a single specimen of a Coccinella which I have not succeeded in identifying. It is considerably larger than C. abdominalis, and is black, with the antennæ, two small spots on the head, a large spot on the front of each side of the thorax, and a spot on the mesosternum on each side, yellow. The elytra are red, the suture and scutellum black, the space around the latter yellow. The probability of this specimen (which was taken in Honolulu) having been imported makes me hesitate to treat it as a previously undescribed species.—T. B.

Genus LXXV.—*Scymnus.* Mun. Cat. XII. p. 3791.

216. Scymnus vividus, Shp., *ante*, p. 146.

Ins. Maui, Hawaii, Oahu. (?) Int.

Probably the rest of the islands. Generally found at the roots of herbage.

217. Scymnus ocellatus, Shp., *ante*, p. 147.

Ins. Maui, Oahu. (?) Int.
Generally found on flowers.

218. Scymnus discedens, Shp., *ante*, p. 147.

Ins. Oahu. (?) Int.
Twice found by sweeping.

Fam. DERMESTIDÆ.

Genus LXXVI.—*Dermestes.* Mun. Cat. III. p. 913.

219. Dermestes cadaverinus, Fab. Schon. Syn. II. 85, 3.

Ins. Oahu, Maui, (?) Hawaii, (?) Lanai, (?) Kauai. Int. Widely distributed.
Common in decaying animal matter on Oahu, Maui, and doubtless all the other islands, at various elevations.

220. Dermestes vulpinus, Fab. Sp. Ins. I. 64.

Ins. Hawaii, Oahu, Kauai. (?) Maui, (?) Lanai. Int. Widely distributed.
Common on these islands, and doubtless all the other islands, in decaying animal matter at various elevations.

Genus LXXVII.—*Attagenus.* Mun. Cat. III. p. 915.

221. Attagenus plebius, Shp., *ante*, p. 147.

Ins. Oahu. (?) Int.
Not rare in houses in Honolulu.

Genus LXXVIII.—*Labrocerus.* Shp., *ante*, p. 148.

222. Labrocerus jaynei, Shp., *ante*, p. 148.

Ins. Maui. (?) Imm.
Taken by beating branches of trees on Haleakala, at an elevation of about 4000 feet. April and May.

223. Labrocerus concolor, Shp., *ante*, p. 149.

Ins. Hawaii. (?) Imm.
Taken by beating branches of trees, at an elevation of about 6000 feet, on Mauna Loa.

224. Labrocerus obscurus, Blackb., *ante*, p. 149.

Ins. Hawaii. (?) Imm.
Unique; Mauna Loa, at an elevation of about 6000 feet. May.

Genus LXXIX.—*Cryptorhopalum.* Mun. Cat. III. p. 919.

225. Cryptorhopalum brevicorne, Shp., *ante*, p. 150.

Ins Oahu. (?) Int.

In houses, in the island of Oahu, and probably elsewhere.

226. Cryptorhopalum terminale, Shp., *ante*, p. 150.

Ins. Oahu, Kauai. (?) Int.

In houses, Kauai, Oahu, and probably elsewhere.

Fam. LUCANIDÆ.

Genus. LXXX.—*Apterocyclus.* Wat. Trans. Ent. Soc. Lond. 1871, p. 315.

227. Apterocyclus honoluluensis, Wat. l. c.

Ins. Kauai. (?) Imm.

This insect was described on a specimen in the the British Museum from Mr. H. Harper Pease. It was taken on the mountains of Kauai, but I have not been able to find any trace of it there.

Fam. SCARABÆIDÆ.

Tribe COPRINI.

Genus LXXXI.—*Aphodius.* Mun. Cat. IV. p. 1042.

228. Scarabeus lividus, Ol. Ins. I. 3, 93, pl. 26, fig. 222.

Ins. Hawaii, Maui, Lanai, Oahu, Kauai. Int. Cosmopolite.

Common all over the islands.

Genus LXXXII.—*Atænius.* Mun. Cat. IV. p. 1066.

229. Aphodius pacificus, Shp. Trans. Ent. Ent. Soc. Lond. 1879, p. 90.

Ins. Oahu. (?) Int. (?) New Zealand.

Occurs in the neighbourhood of Honolulu, at various elevations.

230. Atænius stercorator (Fabr.), Horn, Tr. Am. Ent. Soc. III. p. 286.

Ins. Oahu. Int. Widely distributed.

Not rare in the neighbourhood of Honolulu; generally on the plains near sea level.

231. Atænius peregrinator, Har. Ann. Mus. Gen. X. p. 96.

Ins. Oahu. Int. Celebes, Borneo.

Four specimens occurred on the mountains, but at no great elevation, near Honolulu.

Genus LXXXIII.—*Saprosites.* Mun. Cat. iv. p. 1065.

232. Saprosites pygmæus, Har. op. cit. p. 91.

Ins. Oahu, Maui, (?) Hawaii, (?) Lanai, (?) Kauai. Int. or imm. Key Islands.
Probably on all the other islands. This species is seldom found at an elevation lower than 1500 eet. It has occurred on Maui, not much below 5000 feet.

Fam. EUCNEMIDÆ.

Genus LXXXIV.—*Fornax.* Mun. Cat. v. p. 1469.

233. Fornax bonvouloiri, Shp., *ante*, p. 151.

Ins. Oahu, Maui. (?) Imm.
Occurs in or on the bark of trees (usually Acacia falcata), at elevations varying from 1500 to 5000 feet. Probably occurs on other of the islands.

234. Fornax sculpturatus, Blackb., *ante*, p. 151.

Ins. Oahu. (?) Imm.
Unique; occurred on the Waianae Mountains, Oahu, under bark.

235. Fornax obtusus, Blackb., *ante*, p. 152.

Ins. Maui. (?) Imm.
Under bark on Haleakala, at an elevation of nearly 5000 feet. Two examples.

236. Fornax longicornis, Blackb., *ante*, p. 152.

Ins. Maui. (?) Imm.
Two examples, at an elevation of about 4000 feet, on Haleakala.

237. Fornax parallelus, Blackb., *ante*, p. 152.

Ins. Oahu. (?) Imm.
Unique; found in damp moss, near the summit of Konahuanui.

Fam. BUPRESTIDÆ.

Genus LXXXV.—*Buprestis.* Mun. Cat. v. p. 1377.

238. Buprestis adjecta, Lec. Proc. Ac. Phil. 1854, p. 17.

Ins. Oahu. Int. Oregon.
A single specimen occurred on a flower, near Honolulu.

Fam. ELATERIDÆ.

Tribe AGRYPNIDES.

Genus LXXXVI.—*Adelocera.* Mun. Cat. v. p. 1489.

239. Agrypnus modestus, Boisd. Voy. Astrol. Col. p. 108.

Ins. Oahu. Imm. Polynesia, &c. Widely distributed.

Common near Honolulu, and probably in other parts of the islands. It has been taken at various elevations and under different circumstances, but most frequently on the plains, and in or about decaying stems of cactus.

Tribe CHALCOLEPIDIIDES.

Genus LXXXVII.—*Chalcolepidius.* Mun. Cat. v. p. 1502.

240. Chalcolepidius erythroloma, Cand. Mon. I. p. 282. Syn. C. albertisi Cand. Bull. Soc. Ent. Belg. 1878, p. 55.

Ins. Oahu. (?) Int. or imm. Chili. Ecuador.

Not common; occurs near Honolulu (generally on the mountains), and frequents the exuding sap of Acacia falcata.

Tribe ELATERIDES VRAIS.

Genus LXXXVIII.—*Ischiodontus.* Mun. Cat. v. p. 1515.

241. Ischiodontus hawaiensis, Cand. El. nouv: fasc. III. p. 42.

Int. (?)

"Sandwich Islands," Cand. Unknown to us.

Genus LXXXIX.—*Simodactylus.* Mun. Cat. v. p. 1519.

242. Æolus cinnamomeus, Boisd. Voy. Astr. Col. p. 106.

Ins. Oahu. Imm. Polynesia.

Not uncommon on the mountains near Honolulu. Usually obtained by beating.

Genus XC.—*Melanoxanthus.* Mun. Cat. v. p. 1538.

243. Elater melanocephalus, Thunb. Nov. Ins. Spec. III. 1784, p. 63.

Ins. Oahu. Imm. Widely distributed.

Rather common in and around Honolulu; often taken flying; sometimes under bark of acacia.

Genus XCI.—*Eopenthes.* Shp., *ante*, p. 153.

244. Eopenthes basalis, Shp., *ante*, p. 153.

Ins. Oahu. Aut.

In the mountains near Honolulu.

245. Elater humeralis, Karsch. Berl. Ent. Zeit. XXV. p. 5, taf. I. f. 7.

Ins. Maui. Aut.

Stated to have been taken by Dr. Finsch on Maui, at a place called Olinda.

246. Eopenthes obscurus, Shp., *ante*, p. 154.

Ins. Oahu. Aut.
Also found in the mountains near Honolulu.

247. Eopenthes konæ, Blackb., *ante*, p. 154.

Ins. Hawaii. Aut.
A single example was taken on the wing, near Kona, at an elevation of about 5000 feet.

248. Eopenthes satelles, Blackb., *ante*, p. 155.

Ins. Lanai. Aut.
A single example taken by sweeping ferns, near Koele, at an elevation of about 2000 feet.

249. Eopenthes debilis, Shp., *ante*, p. 154.

Ins. Oahu. Aut.
Found by sweeping ferns, at an elevation of about 2500 feet, on the Waianae Mountains.

250. Eopenthes ambiguus, Blackb., *ante*, p. 155.

Ins. Oahu. Aut.
A single example was found by sweeping at the head of the Palolo valley, at an elevation of about 2000 feet.

Genus XCII.—*Itodacnus.* Shp., *ante*, p. 156.

251. Itodacnus gracilis, Shp., *ante*, p. 156.

Ins. Oahu. (?) Imm. or aut.
Rare ; obtained by beating branches of trees, at an elevation of 1500 to 2000 feet, at various places on the mountains of Oahu. July and September.

252. Corymbites coruscus, Karsch, Berl. Ent. Zeit. xxv. p. 5, taf. i. f. 6.

Ins. Maui. (?) Imm. or aut.
Olinda.

Fam. MALACODERMIDÆ.

Genus XCIII.—*Helcogaster.* Mun. Cat. iii. p. 1719.

253. Helcogaster pectinatus, Shp., *ante*, p. 157.

Ins. Oahu. (?) Int.
Occasionally found in houses (generally crawling on the glass in the windows) in Honolulu.

Genus XCIV.—*Caccodes.* Shp., *ante*, p. 157.

254. Caccodes debilis, Shp., *ante*, p. 157.

Ins. Oahu. (?) Int.
Usually found in houses in Honolulu ; once crawling on a log of wood, close to a house.

Fam. CLERIDÆ.

Genus XCV.—*Tarsostenus.* Mun. Cat. VI. p. 1740.

255. Clerus univittatus, Rossi, Faun. Etr. I. p. 44.

Ins. Oahu. Int. Widely distributed.

Three specimens have occurred—all of them within a short distance of one spot in Honolulu, but at different times: two of them in spiders' webs; the other crawling on a window.

Genus XCVI.—*Necrobia.* Mun. Cat. VI. p. 1758.

256. Dermestes rufipes. Fab. Syst. El. I. p. 286.

Ins. Hawai, Maui, Lanai, Oahu, Kauai. Int. Widely distributed.

Plentiful in decaying animal matter all over the islands.

257. Dermestes ruficollis, Fab. Syst. Ent. p. 57.

Ins. Hawaii, Maui, Lanai, Oahu, Kauai. Int. Widely distributed.

Plentiful in decaying animal matter all over the islands.

Fam. PTINIDÆ.

Genus XCVII.—*Holcobius.* Shp. Trans. Ent. Soc. Lond. 1881, p. 522.

258. Holcobius major, Shp. op. cit. p. 521.

Ins. Maui. Aut.

Two specimens were taken from dead branches of trees, at an elevation of about 4000 feet, on Haleakala. April and May.

259. Holcobius glabricollis, Shp. op. cit. p. 520.

Ins. Oahu. Aut.

Two specimens were dug out of a koa tree in the Palolo valley, near Honolulu, at an elevation of about 1000 feet.

260. Holcobius granulatus, Shp. l. c.

Ins. Hawaii, Maui. Aut.

Not uncommonly to be met with by beating dead branches of trees, on the mountains of Maui and Hawaii, at elevations varying from 3500 to 6000 feet. April and May.

Genus XCVIII.—*Xyletobius.* Shp. op. cit. p. 519.

261. Xyletobius insignis, Blackb., *ante*, p. 158.

Ins. Hawaii. Aut.

Unique; occurred at an elevation of about 4000 feet on Mauna Loa.

262. Xyletobius oculatus, Shp. Trans. Ent. Soc. Lond. 1881, p. 519.

Ins. Hawaii. Aut.
Obtained by beating dead branches of trees on Mauna Loa, at an elevation of 4000 feet. February.

263. Xyletobius nigrinus, Shp. op. cit. p. 518.

Ins. Maui. Aut.
Obtained by beating dead branches of trees, at an elevation of 4000 to 5000 feet, on Haleakala. February.

264. Xyletobius marmoratus, Shp. op. cit. p. 517.

Ins. Maui. Aut.
Not rare on Haleakala, at an elevation of 4000 to 5000 feet. Obtained by beating dead branches of trees. April and May.

265. Xyletobius affinis, Shp., *ante*, p. 158.

Ins. Hawaii. Aut.
A short series was taken from dead wood, at an elevation of about 6000 feet, on Mauna Loa. May.

266. Xyletobius serricornis, Blackb., *ante*, p. 159.

Ins. Lanai. Aut.
Unique; obtained by beating dead wood, at an elevation of about 2000 feet, near a place called Koele.

267. Xyletobius lineatus, Shp., *ante*, p. 159.

Ins. Hawaii. Aut.
Two specimens were obtained by beating dead wood, at an elevation of about 6000 feet, on Mauna Loa. May.

268. Tripopitys capucinus, Karsch, Berl. Ent. Zeit. xxv. p. 6, taf. i. f. 8.

Ins. Maui. Aut.
Olinda. The genus to which this should be ascribed is not quite certain, but if not Xyletobius it will be near to it.

Genus XCIX.—*Anobium.* Mun. Cat. vi. p. 1771.

269. Dermestes paniceus, L. Faun. Suec. p. 145.

Ins. Oahu. Int. Widely distributed.
Several specimens were taken in the city of Honolulu, in decaying timber. October.

Genus C.—*Lasioderma.* Mun. Cat. vi. p. 1781.

270. Ptinus serricornis, Fab. Ent. Syst. i. p. 241.

Ins. Oahu, Kaai. Int. Widely distributed.
Plentiful in Honolulu; frequently found in cigars. A single example was found on Kauai in July.

Genus CI.—*Catorama*. Mun. Cat. VI. p. 1784.

271. Catorama mexicana, Chev. in litt.

Ins. Maui. Int. Mexico.

Common on Maui, in houses and in decaying trees, near sea level.

272. Catorama pusilla, Shp., *ante*, p. 160.

Ins. Maui. (?) Int.

Two specimens occurred on Maui.

Genus CII.—*Mirosternus*. Shp. Trans. Ent. Soc. Lond. 1881, p. 526.

273. Mirosternus punctatus, Shp. op. cit. p. 522.

Ins. Oahu. Aut.

Found by beating dead branches of trees on the Waianae mountains, at an elevation of 2000 or 3000 feet. July.

274. Mirosternus obscurus, Shp. op. cit. p. 523.

Ins. Oahu. Aut.

Found in company with M. punctatus.

275. Mirosternus muticus, Shp. l. c.

Ins. Hawaii, Maui. Aut.

Occurs at elevations varying from 2000 to 6000 feet above sea level, and is taken by beating dead branches of trees on the mountains of Maui and Hawaii.

N. B. The original specimens occurred on Hawaii; more recently, however, a specimen was taken on Maui, which does not appear to differ from them sufficiently decisively (though it is evidently larger) to be treated as distinct.

276. Mirosternus carinatus, Sh. op. cit. p. 524.

Ins. Maui. Aut.

Not rare on Haleakala, where it is obtained by beating dead branches of trees, at an elevation of 4000 to 5000 feet.

277. Mirosternus glabripennis, Shp. l. c.

Ins. Oahu. Aut.

Obtained by beating dead branches of trees, at an elevation of about 1000 feet, on the Waianae mountains.

278. Mirosternus debilis, Shp. op. cit. p. 525.

Ins. Oahu. Aut.

In company with the preceding.

279. Mirosternus bicolor, Shp. l. c.

Ins. Oahu. Aut.

Also in company with M. glabripennis, Shp. Two specimens occurred.

280. Mirosternus acutus, Blackb., *ante*, p. 160.

Ins. Kauai. Aut.

Unique; obtained by beating dead branches, at an elevation of about 2000 feet.

Fam. BOSTRICHIDÆ.

Genus CIII.—*Bostrichus.* Mun. Cat. vi. p. 1791.

281. Bostrichus migrator, Shp., *ante*, p. 160.

Ins. Oahu. Int. Nicaragua.

Not rare in various localities on Oahu; generally in houses or decaying trunks of trees. Probably occurs on other islands also.

Genus CIV.—*Apate.* Mun. Cat. vi. p. 1788.

282. Apate lifuana, Mont. Ann. Soc. Ent. Fr. 1861, p. 267.

Ins. Oahu. Int. or imm. Ins. Lifu.

About equally common with the preceding, and like it found in various localities on Oahu. Once found rather commonly in burrows in acacia.

Genus CV.—*Xylopertha.* Mun. Cat. vi. p. 1790.

283. Apate castanoptera, Fairm. Essai sur les Col. de la Polynesie, p. 77.

Ins. Oahu. Imm. or int. Widely distributed.

Generally found in burrows, or channels, in various species of acacia. Taken on Oahu only, but probably occurring on others of the islands. The Munich Catalogue records this insect under the name of X. minuta, Fab.

Genus CVI.—*Rhyzopertha.* Mun. Cat. vi. p. 1792.

284. Rhyzopertha pusilla, Steph. Ill. Brit. Ent. iii. p. 354.

Ins. Oahu. Int. Widely distributed.

Two specimens occurred near Honolulu, but the exact particulars of the capture have been lost.

Genus CVII.—*Lyctus.* Mun. Cat. vi. 1793.

285. Xylotrogus brunneus, Steph. Ill. Brit. Ent. iii. p. 117.

Ins. Oahu. Int. Widely distributed. Rare.

Fam. CIOIDÆ.

Genus CVIII.—*Cis.* Mun. Cat. vi. p. 1796.

286. Cis alienus, Shp. Trans. Ent. Soc. Lond. 1879, p. 91.

Ins. Oahu. (?) Imm.

Two specimens occurred in decaying wood, on the mountains, near Honolulu.

287. Cis pacificus, Shp. l. c.

Ins. Oahu. Aut.

Not rare in fungi, on the trunks of trees, in mountain forests.

288. Cis porcatus, Shp. op. cit. p. 92.

Ins. Hawaii, Oahu, Kauai. (?) Maui (?) Lanai. Aut.
Occurs in decaying wood, on the mountains.

289. Cis bimaculatus, Shp., *ante*, p. 161.

Ins. Hawaii, Maui. Aut.
Found rarely on the higher mountains.

290. Cis nigrofasciatus, Blackb., *ante*, p. 162.

Ins. Lanai. Aut.
Unique; beaten from dry wood, at an elevation of about 2000 feet, on the mountains of Lanai, near a place called Koele.

291. Cis signatus, Shp. Trans. Ent. Soc. Lond. 1879, p. 92.

Ins. Hawaii, Maui, Oahu. (?) Lanai (?) Kauai.
Also probably others of the islands. Generally obtained by beating dry wood, at a considerable elevation, on the mountains.

292. Cis attenuatus, Shp., *ante*, p. 165.

Ins. Kauai. Aut.
On the mountains.

293. Cis bicolor, Shp. Trans. Ent. Soc. Lond. 1879, p. 93. Var. (?) C. tabidus, Shp. l. c.

Ins. Hawaii, Maui, Oahu, Kauai. Aut.
Not uncommon in decaying wood, on the mountains.

294. Cis setarius, Shp., *ante*, p. 162. Var. (?) C. apicalis, Shp. l. c.

Ins. Hawaii. Aut.
Not rare in decayed wood, on the mountains of Hawaii, at an elevation of 4000 to 7000 feet.

295. Cis concolor, Shp., *ante*, p. 163.

Ins. Hawaii. Aut.
Rare; occurs at an elevation of about 6000 feet, on Mauna Kea. May.

296. Cis chloroticus, Shp., *ante*, p. 164.

Ins. Maui. Aut.
Rare; taken in dead wood, at an elevation of about 4000 feet, on Haleakala.

297. Cis calidus, Shp., *ante*, p. 164.

Ins. Oahu. Aut.
Two specimens have been taken in dead wood in different localities, but both at an elevation of about 2000 feet, on the mountains.

298. Cis insularis, Shp., *ante*, p. 164.

Ins. Oahu. Aut.
Three specimens have been taken at different times, in dead wood, on the mountains.

299. Cis roridus, Shp., *ante*, p. 165.

Ins. Hawaii. Aut.

Two specimens were taken from dead wood, at an elevation of about 3000 feet, on the mountains near Waimea.

300. Cis diminutivus, Shp. Trans. Ent. Soc. 1879, p. 94.

Ins. Oahu. Aut.

Two specimens were taken by beating dry branches of trees on Konahuanu

301. Cis læticulus, Shp. l. c.

Ins. Oahu. Aut.

Occurs near Honolulu, but the exact particulars of the capture have been lost.

302. Cis longipennis, Blackb., *ante*, p. 162.

Ins. Kauai. Aut.

Unique; found in decayed wood, on Waialeale, at an elevation of about 2000 feet.

303. Cis evanescens, Shp. Trans. Ent. Soc. Lond. 1179, p. 95.

Ins. Oahu, Kauai. Aut.

Found in decaying wood, in forests, on the mountains.

304. Cis ephistemoides, Shp., *ante*, p. 165.

Ins. Oahu, Kaui, Lanai, (?) Hawaii, (?) Maui.

Also probably the other islands. Occurs in decaying wood, at a considerable elevation, on the mountains. The specimen from Lanai is markedly larger than the others.

305. Cis vagepunctatus, Blackb., *ante*, p. 166.

Ins. Oahu. Aut.

Unique; a single specimen was obtained from decaying wood on the mountains, near Honolulu.

Fam. TENEBRIONIDÆ.

Tribe Epitragini.

Genus CIX.—*Epitragus.* Mun. Cat. vii. p. 1840.

306. Epitragus diremptus, Karsch, Berl. Ent. Zeit. xxv. p. 6.

Ins. Maui, Oahu, Kauai, (?) Hawaii, (?) Lanai. (?) Imm. (?) South America.

And probably all the rest of the islands. Common under stones near the sea level, and also various other kinds of places.

Tribe Opatrini.

Genus CX.—*Opatrum.* Mun. Cat. vii. p. 1930.

307. Opatrum seriatum, Bois. Voy. Astr. Col. p. 252.

Ins. Kauai, Oahu, Molokai, Lanai, Maui, Hawaii. Imm. Radack Islands.

Generally found under stones, not much above sea level.

Tribe DIAPERINI.

Genus CXI.—*Platydema.* Mun. Cat. VII. p. 1950.

308. Platydema obscurum, Shp., *ante*, p. 166.

Ins. Oahu. (?) Imm.
At various elevations, and in various localities; generally under stones.

Tribe ULOMINI.

Genus CXII.—*Gnathocerus.* Mun. Cat. VII. p. 1957.

309. Trogosita cornuta, Fab. Ent. Syst. Supp. p. 51.

Ins. Oahu. Int. Widely distributed.
Common in Honolulu, in flour, &c.

Genus CXIII.—*Tribolium.* Mun. Cat. VII. p. 1958.

310. Tenebrio ferrugineus, Fab. Sp. Ins. I. p. 324.]

Ins. Oahu. Int. Widely distributed.
Common in Honolulu, in flour, &c.

Genus CXIV.—*Alphitobius.* Mun. Cat. VII. p. 1962.

311. Tenebrio diaperinus, Panz. Ins. Germ. 37, 16.

Ins. Maui, Oahu. (?) Hawaii, (?) Lanai, Kauai. Int. Widely distributed.
Also probably other islands. Frequently found in flour, &c.; also under stones.

312. Helops piceus, Ol. Ent. III. 58, p. 17. Syn. Heterophaga mauritanica, Fairm. Rev. Zool. 1849, p. 446.

Ins. Kauai, Oahu, Lanai. (?) Hawaii, (?) Maui. Int. Widely distributed.
Doubtless occurs on the other islands. Plentiful in all kinds of produce; also under stones.

Genus CXV.—*Sciophagus.* Shp., *ante*, p. 167.

313. Heterophaga pandanicola (Esch.) Fairm. Rev. Zool. 1849, p. 446.

Ins. Oahu, Kauai. (?) Hawaii, (?) Maui, (?) Lanai. Int. Polynesia.
Also probably other islands; generally found under bark or in decaying wood, especially of the pandanus. Also found under stones. Has not occurred much above sea level.

Fam. CISTELIDÆ.

Genus CXVI.—*Labetis.* Waterh. Ent. Mo. Mag. XV. p. 267.

314. Labetis tibialis, Waterh. l. c. et *ante*, p. 167.

Ins. Oahu. (?) Imm.
A single pair occurred on the mountains of Oahu, at an elevation of about 1500 feet, in localities twenty miles apart. They were obtained by beating branches of trees.

Genus CXVII.—*Cistela.* Mun. Cat. vii. p. 2046.

315. Cistela crassicornis, Shp., *ante*, p. 168.

Ins. Oahu. (?) Imm.

A pair of this was taken, but in widely separated localities, on Oahu, by beating branches of trees, at an elevation of about 1500 feet.

Fam. ANTHICIDÆ.

Genus CXVIII.—*Anthicus.* Mun. Cat. vii. p. 2092.

316. Anthicus occanicus, Laferté, Mon. Anth. p. 170.

Ins. Maui, Oahu, Kauai. (?) Hawaii, (?) Lanai. (?) Imm. Marquesas.

Probably also on the other islands. Common on the sea-shore, near high-water mark.

317. Anthicus mundulus, Shp., *ante*, p. 168.

Ins. Oahu, Kauai. (?) Hawaii, (?) Maui, (?) Lanai. (?) Imm.

Probably exists on the other islands. Usually found about salt marshes, near sea level.

Fam. ŒDEMERIDÆ.

Genus CXIX.—*Ananca.* Mun. Cat. vii. p. 2168.

318. Ananca collaris, Shp., *ante*, p. 169.

Ins. Oahu. (?) Int.

Common near Honolulu—usually taken at light—occasionally on flowers, especially of the exotic eucalypti.

Fam. AGLYCYDERIDÆ.

Genus CXX.—*Proterhinus.* Shp. Trans. Ent. Soc. Lond. 1878, p. 20.

319. Proterhinus paradoxus, Shp. op. cit. 1879, p. 100.

Ins. Oahu. Aut.

Two examples occurred in bark of a tree in a mountain forest, near Honolulu.

320. Proterhinus longulus, Shp. op. cit. p. 97.

Ins. Oahu. Aut.

Found in stems of fern growing on the mountains near Honolulu, at an elevation of about 1500 feet.

321. Proterhinus linearis, Blackb., *ante*, p. 169.

Ins. Kauai. Aut.
Unique.

322. Proterhinus blackburni, Shp. Trans. Ent. Soc. Lond. 1878, p. 17.

Ins. Oahu. (Var.) Oahu, Lanai. Aut.
The specimens first described were beaten from branches of trees near Honolulu, at an elevation between 1500 to 2000 feet. The examples subsequently obtained on the Waianae mountains, Oahu, and on Lanai, Mr. Blackburn thinks connect P. hystrix with this species.

323. Proterhinus hystrix, Shp. op. cit. 1881, p. 527.

Ins. Hawaii. Aut.
Found at an elevation of more than 4000 feet.

324. Proterhinus pusillus, Shp. op. cit. 1879, p. 97.

Ins. Oahu. Aut.
Several examples have been beaten from branches of trees, on the mountains near Honolulu, 1500 to 2000 feet. A single specimen taken on the Waianae mountains, Oahu, is possibly a variety, but more probably a new species.

325. Proterhinus simplex, Shp. op. cit, 1878, p. 17. Var. (?) P. obscurus, Shp. op. cit. p. 18.

Ins. Oahu. Aut.
Oahu; not uncommon on the mountains near Honolulu, Occurs in the bark of trees, at an elevation of about 1500 to 2000 feet. A very closely allied species, or constant variety, occurs on the Waianae mountains, Oahu, but there are not forthcoming sufficiently good specimens to enable it to be dealt with satisfactorily.

326. Proterhinus scutatus, Blackb., *ante*, p. 169.

Ins. Kauai. Aut.
Taken by beating branches of trees, at an elevation of about 4000 feet, near a place called Makawele.

327. Proterhinus similis, Blackb., *ante*, p. 170.

Ins. Hawaii. Aut.
Taken by beating branches of trees, at elevations of 3000 to 6000 feet, on the mountains of Hawaii.

328. Proterhinus tarsalis, Blackb., *ante*, p. 171.

Ins. Hawaii. Aut.
A short series was taken by beating branches of trees, at an elevation of about 6000 feet, on Mauna Loa, Hawaii.

329. Proterhinus gracilis, Shp. Trans. Ent. Soc. Lond. 1881, p. 529.

Ins. Hawaii. Aut.
Occurs in bark of trees on Mauna Loa, at an elevation of about 4000 feet.

330. Proterhinus debilis, Shp. op. cit. 1878, p. 19.

Ins. Oahu, Hawaii. Aut.

The original specimens of this insect were taken on the Waianae mountains, Oahu; subsequently a series apparently identical, or nearly so, occurred at various elevations and in various localities, on the mountains of Hawaii.

331. Proterhinus oscillans, Shp. op. cit. p. 18.

Ins. Oahu. Aut.

Taken by beating branches of trees, at an elevation of about 2000 feet, on the mountains near Honolulu.

332. Proterhinus punctipennis, Shp. op. cit. 1881, p. 530.

Ins. Maui. Aut.

Four specimens of this insect were taken by beating branches of trees, at an elevation of about 4000 feet, on Haleakala.

333. Proterhinus laticollis, Blackb., *ante*, p. 170.

Ins. Oahu. Aut.

A single specimen of this insect was beaten from an acacia on the Waianae mountains.

334. Proterhinus robustus, Blackb., *ante*, p. 171.

Ins. Oahu. Aut.

A single specimen of this insect was taken on the Waianae mountains.

335. Proterhinus integer, Shp., *ante*, p. 172.

Ins. Lanai. Aut.

Taken by beating branches of trees near a place called Koele, at an elevation of about 2000 feet, on the mountains of Lanai.

336. Proterhinus humeralis, Shp. Trans. Ent. Soc. Lond. 1879, p. 96.

Ins. Maui. Aut.

Not rare on Haleakala, at an elevation of 4000 to 5000 feet, Obtained by beating branches of trees.

337. Proterhinus ineptus, Shp., *ante*, p. 171.

Ins. Lanai. Aut.

Occurs (not rarely) on the bark of trees, on the mountains of Lanai,

338. Proterhinus angularis, Shp. Trans. Ent. Soc. Lond. 1881, p. 530.

Ins. Oahu. Aut.

Taken by beating trees on the mountains, near Honolulu.

339. Proterhinus nigricans, Shp. op. cit. 1879, p. 95. Var. (?) P. collaris, Shp. op. cit. p. 96.

Ins. Kauai. Aut.

Taken by beating branches of trees in the forests, at an elevation of about 3000 feet, on Waialeale, Kauai.

340. Proterhinus vestitus, Shp. op. cit. 1878, p. 16.

Ins. Oahu. Aut.

Not uncommon on the mountains near Honolulu, at elevations varying from 1000 to 3000 feet. Generally obtained by beating branches of trees. Particularly common near the head of the Palolo valley.

341. Proterhinus detritus, Shp., *ante*, p. 172.

Ins. Lanai. Aut.

Taken by beating branches of trees on the mountains of Lanai. Not common.

342. Proterhinus longicornis, Shp., *ante*, p. 172.

Ins. Lanai. Aut.

Occurs on the mountains of Lanai, near Koele, at an elevation of about 2500 feet. Not common.

343. Proterhinus sternalis, Shp. Trans. Ent. Soc. Lond. 1879, p. 98.

Ins. Maui. Aut.

Occurs, not very rarely, in the bark of dead branches of trees, at an elevation of about 4000 feet, on Haleakala.

344. Proterhinus basalis, Shp. l. c.

Ins. Kauai. Aut.

Three specimens were taken by beating dead wood, at an elevation of about 3000 feet, on Waialeale.

345. Proterhinus dispar, Shp. op. cit. 1881, p. 528.

Ins. Oahu. Aut.

Not rare on the mountains above the head of the Palolo valley, Oahu. The tree on which it occurs is one unknown to me by name.

346. Proterhinus validus, Shp. op. cit. p. 531.

Ins. Maui. Aut.

Rare; occurs in the bark of Acacia falcata, at an elevation of about 4000 feet, on Haleakala.

347. Proterhinus insignis, Shp., *ante*, p. 172.

Ins. Lanai. Aut.

Occurs rarely in the bark of trees, on the mountains of Lanai, at an elevation of 2000 to 3000 feet.

348. Proterhinus lecontei, Shp. Trans. Ent. Soc. Lond. 1879, p. 99.

Ins. Maui. Aut.

Not rare in the bark of a tree (unknown to me by name) on Haleakala, at an elevation of about 4000 feet.

Fam. CURCULIONIDÆ.

Tribe Otiorhynchini.

Genus CXXI.—*Rhyncogonus.* Shp., *ante*, p. 176.

349. Rhyncogonus blackburni, Shp., *ante*, p. 177.

Ins. Oahu. (?) Imm.

Rare; six specimens in all have occurred in the Pauoa and Palolo valleys, at elevations of about 1500 feet above the sea. They were found on the branches of trees.

350. Rhyncogonus vestitus, Shp., *ante*, p. 177.

Ins. Maui. (?) Imm.

Not rare on a maritime plant growing on the sandhills, on the isthmus connecting East and West Maui. February.

Tribe Cyladini.

Genus CXXII.—*Cylas.* Mun. Cat. viii. p. 2458.

351. Cylas turcipennis, Boh. Sch. Gen. Curc. i. p. 369.

Ins. Maui, Oahu. (?) Hawai, (?) Lanai, (?) Kauai. Imm. Widely distributed.

Probably to be found on all the other islands. Common in sandy places near the sea-shore.

Tribe Cryptorhynchini.

Genus CXXIII.—*Acalles.* Mun. Cat. viii. p. 2555.

352. Acalles lateralis, Shp., *ante*, p. 178.

Ins. Oahu. (?) Imm. or aut.

Taken by beating branches of trees (generally Aleurites triloba), at an elevation of about 1500 feet, on the mountains.

353. Acalles duplex, Shp., *ante*, p. 178.

Ins. Oahu. (?) Imm. or aut.

Not uncommon on trees in the mountain forests near Honolulu.

354. Acalles angusticollis, Shp., *ante*, p. 179.

Ins. Oahu, Maui, Kauai, Lanai. (?) Imm. or aut.

The original specimens were taken on Oahu. Examples, incapable of being satisfactorily distinguished, have since occurred on Kauai, Maui, and Lanai; it is very probable, however, that the examination of a long series from various localities, all in good condition, would lead to the distinction of several species now included under the name of A. angusticollis.

355. Acalles decoratus, Blackb., *ante*, p. 180.

Ins. Lanai. (?) Imm. or aut.

Unique; taken by beating, at an elevation of about 2000 feet, on the mountains of Lanai.

356. Acalles mauiensis, Blackb., *ante*, p. 181.

Ins. Maui, Lanai (var.). Imm. or aut.

Taken by beating, at an elevation of about 4000 feet, on Haleakala, Maui. The specimen from Lanai mentioned in the "Descriptions" (vide *ante*, p. 180) as closely allied to it, is probably a distinct species.

357. Acalles ignotus, Blackb., *ante*, p. 180.

Ins. Oahu. (?) Imm. or aut.

Unique; taken on Oahu, but the account of the capture is not particularly recorded.

Genus CXXIV.—*Chænosternum.* Blackb., *ante*, p. 181.

358. Chænosternum konanum, Blackb., *ante*, p. 182.

Ins. Oahu. (?) Imm. or aut,

Unique; taken near Honolulu, Oahu.

Genus CXXV.—*Hyperomorpha.* Blackb., *ante*, p. 182.

359. Hyperomorpha squamosa, Blackb., *ante*, p. 183.

Ins. Oahu. (?) Imm. or aut,

Unique; occurred in very wet moss, on the margin of a mountain stream, in the Pauoa valley.

Tribe CALANDRINI.

Genus CXXVI.—*Sphenophorus.* Mun. Cat. VIII. p. 2646.

360. Calandra obscura, Boisd. Voy. Astr. II. p. 448, Fairm. Rev. Zool. 1849, p. 474.

Ins. Oahu. Int. Tahiti, New Ireland.

In the stems of banana, on the mountains. This insect is apparently omitted in the Munich Catalogue of Coleoptera.

Genus CXXVII.—*Calandra.* Mun. Cat. VIII. p. 2653.

361. Calandra remota, Shp., *ante*, p. 183.

Ins. Oahu. (?) Imm.

Rather common in decaying wood, especially stems of cactus and banana, at various elevations.

362. Calandra linearis, var. striata, Thunb. Nov. Act. Ups. VII. p. 112.

Ins. Oahu. Int. Widely distributed.

Plentiful in decaying tamarinds, near Honolulu.

363. Curculio oryzæ, Linn. Amœn. Ac. VI. p. 395.

Ins. Oahu. Int. Cosmopolite.

Honolulu; excessively abundant in flour, sugar, and almost all other edibles.

Tribe Cossonini.

Genus CXXVIII.—*Heteramphus.* Shp., *ante*, p. 188.

364. Heteramphus wollastoni, Shp., *ante*, p. 187.

Ins. Oahu. Aut.

Not rare in the stems of a species of lily growing at an elevation of about 2500 to 3000 feet, on some of the mountain ridges near Honolulu.

365. Heteramphus foveatus, Shp., *ante*, p. 188.

Ins. Oahu. Aut.

Occurs in company with the preceding.

366. Heteramphus hirtellus, Shp., *ante*, p. 189.

Ins. Oahu. Aut.

Unique; taken by sifting dead leaves and débris in the Pauoa Valley,

367. Heteramphus cylindricus, Shp., *ante*, p. 189.

Ins. Oahu. Aut.

Two specimens occurred in company with *H. wollastoni*.

Genus CXXIX.—*Pentarthrum.* Mun. Cat. viii. p. 2657.

368. Pentarthrum prolixum, Shp. Trans. Ent. Soc. Lond, 1878, p. 25.

Ins. Hawaii, Oahu, (?) Maui, (?) Lauai, (?) Kauai. (?) Aut.

Rare; Oahu, Hawaii, and (probably) others of the islands. In the stems of ferns growing in the mountain forests.

369. Pentarthrum obscurum, Shp. l. c.

Ins. Oahu. (?) Aut.

Occurs in various mountain localities in decaying wood. Not very rare.

370. Pentarthrum blackburni, Shp. op. cit. p. 26.

Ins. Oahu. (?) Aut.

Rare; occurs in decaying wood on the plains near Honolulu.

Genus CXXX.—*Oodemas.* Mun. Cat. viii. p. 2659.

371. Oodemas olindæ, Blackb. Ent. Mo. Mag. xvii. p. 199.

Ins. Oahu. Aut.

Rare; occurs in dead branches of trees near Olinda, on Haleakala, Maui, at an elevation of about 4000 feet.

372. Oodemas robustum, Blackb. Ann. Soc. Ent. Belg. xxi. p. 75.

Ins. Oahu. Aut.

Rare; two specimens were taken out of dead wood on the Waianae Mountains, Oahu.

N.B.—In the original description of this insect (Annales de la Soc. Ent. de Belgique, 1878, p. 75), by some accidental error stated to have occurred in Maui; but there is no evidence of its having actually done so.

373. Oodemas nivicola, Blackb. op. cit. p. 74.

Ins. Oahu. Aut.

Has been taken at various elevations (from 4000 to 10,000 feet above the sea) on Haleakala. is usually found under stones, and probably feeds on the stems or roots of some small plant.

374. Oodemas infernum, Blackb. Ent. Mo. Mag. xvii. p. 199.

Ins. Hawaii. Aut.

A short series was taken from the trunk of an acacia, on Mauna Loa, Hawaii, at an elevation of about 4000 feet, and very near the crater "Kilauea."

375. Oodemas insulare, Blackb. Ann. Soc. Ent. Belg. xxi. p. 74.

Ins. Oahu. Aut.

Very rare. Has been taken singly three or four times on Oahu, generally in the Mauna Loa valley. It appears to be connected with a fruit-bearing tree known in the Hawaiian language as the "Ohia."

376. Oodemas ænescens, Boh. Eug. Res. p. 138, t. 2, f. 6.

Ins. Oahu. Aut.

Very plentiful in all kinds of localities above about 800 feet high, on Oahu. Generally found in decaying wood, under bark, or under stones. Has not been found on any other island.

377. Oodemas sculpturatum, Blackb. Ann. Soc. Ent. Belg. xxi. p. 74.

Ins. Maui. Aut.

Rather common in the decaying wood of acacia falcata on Haleakala, Maui, at an elevation of 4000 o 5000 feet.

378. Oodemas obscurum, Blackb. op. cit. p. 75. O. substrictum, Blackb. Ent. Mo. Mag. xvii. p. 200.

Ins. Maui. Aut.

Not rare on Haleakala, Maui, at an elevation of 2500 to 4000 feet. In dead wood.

379. Oodemas tardum, Blackb., *ante*, p. 184.

Ins. Maui. Aut.

Not common; occurs on Haleakala, Maui.

380. Oodemas æquale, Blackb., *ante*, p. 184.

Ins. Lanai. Aut.

Taken in dead wood, at an elevation of about 2500 feet.

381. Oodemas crassicorne, Blackb., *ante*, p. 184.

Ins. Lanai. Aut.

In similar localities to the preceding.

382. Oodemas halticoides, Blackb. Ent. Mo. Mag. xiv. p. 5.

Ins. Oahu. Aut.

Occurs in dead wood at elevations of 2000 to 3000 feet above the sea, but not commonly.

383. Oodemas angustum, Blackb. Ann. Soc. Ent. Belg. xxi. p. 75.

Ins. Oahu. Aut.

Unique ; the single specimen was taken on the Waianae mountains.

384. Oodemas borrei, Blackb. l. c.

Ins. Maui. Aut.

A short series was taken from the stems of a low plant, to the best of my belief, growing at an elevation of about 4000 feet, on Haleakala; but, unfortunately, the capture is not recorded with greater detail than the mention of the locality.

385. Oodemas mauiense, Blackb. l. c.

Ins. Maui. Aut.

Haleakala, at an elevation of about 4000 to 5000 feet, February.

Genus CXXXI.—*Anotheorus.* Blackb. Ent. Mo. Mag. xiv. p. 5.

386. Anotheorus montanus, Blackb. op. cit. p. 5.

Ins. Oahu. Aut.

Occurs rarely in bark of trees in the mountain forests near Honolulu.

387. Anotheorus ignavus, Blackb. op. cit. xvii. p. 201.

Ins. Maui. Aut.

Rare ; occurs in the bark of acacia at an elevation of 4000 feet or more on Haleakala, Maui.

Genus CXXXII.—*Pseudolus.* Shp., *ante*, p. 190.

388. Rhyncolus longulus, Boh. Eug. Res. p. 149.

Ins. Oahu, Maui. (?) Aut.

Oahu (various localities), Maui and (probably) others of the islands. This species is rather common in bark and decaying wood, especially of cactus.

Genus CXXXIII.—*Phlœophagosoma.* Woll. Trans. Ent. Soc. Lond. 1873, p. 23.

389. Rhyncolus tenuis, Gem. Mun. Cat. viii. p. 2667. Syn. Rhyncolus gracilis, Boh. Eug. Res. p. 149.

Ins. Oahu. Aut.

Rare.

Genus CXXXIV.—*Dolichotelus.* Blackb., *ante*, p. 190.

390. Dolichotelus apicalis, Blackb., *ante*, p. 191.

Ins. Oahu. (?) Aut.

A single specimen occurred in the Kalihi Valley, near Honolulu, in the trunk of a pandanus.

Genus CXXXV.—*Dryophthorus.* Mun. Cat. viii. p. 2657.

391. Dryophthorus squalidus, Shp. Trans. Ent. Soc. Lond. 1878, p. 22.

Ins. Maui, Oahu, Kauai. (?) Hawaii. (?) Lanai. (?) Aut.

Probably occurs in all the other islands. In decaying timber on the mountains at an elevation of 1000 to 4000 feet above the sea.

392. Dryophthorus gravidus, Shp. l. c.

Ins. Oahu. Aut.
Oahu; not rare; under logs of wood on the mountains.

393. Dryophthorus crassus, Shp. op. cit. p. 23. (?) Syn. Rhyncolus opacus, Karsch. Berl. Ent. Zeit. xxv. p. 7.

Ins. Oahu, Maui. (?) Aut.
Under logs of wood on the mountains, at elevations of 2000 to 4000 feet above the sea. Rare. The original specimens were from Oahu. Those from Maui appear indistinguishable; they were taken at Olinda.

394. Dryophthorus declivis, Shp. l. c.

Ins. Hawaii. Aut.
Not very rare under logs of wood on the mountains, about 2000 feet above the sea.

395. Dryopthorus modestus, Shp. l. c.

Ins. Hawaii, Maui, Oahu, (?) Lanai, (?) Kauai. (?) Aut.
Probably the other islands. Not very rare under logs of wood on the mountains, at various elevations, from 2000 to 6000 feet above the sea.

396. Dryopthorus pusillus, Shp. op. cit. p. 24.

Ins. Oahu. (?) Aut.
Rare; occurs in the decaying stems of ferns on the mountains near Honolulu.

397. Dryopthorus insignis, Shp. l. c.

Ins. Oahu. (?) Aut.
Not rare in and under decaying wood on the mountains, at an elevation of about 2000 feet.

N.B.—Fairmaire (Essai sur les Coléopteres de la Polynésie, p. 71) mentions having seen in the collection of M. Chevrolat a specimen of Dryopthorus bituberculatus, Fab., from the Hawaiian Islands. He quotes Olivier as stating that the specimen ticketed by Fabricius did not appear to be the real subject of that author's description, and as supplying a correct figure of the specimen in question. This same insect (*i. e.* the example from the Hawaiian Islands) has been described by Boisduval as Dryopthorus crenatus. In all probability the insect answering to the description of Fabricius was not a Hawaiian species; that which Olivier described, and which Fairmaire thinks identical with the Hawaiian specimen he mentions, may possibly have been the same as D. squalidus, Shp., but there does not appear good reason to consider decidedly that either of the names D. bituberculatus of Fab. or Ol., or D. crenatus, Boisd., can be identified with any insect occurring on the Hawaiian Islands.

Fam. SCOLYTIDÆ.

Tribe Scolytini.

Genus CXXXVI.—*Xyleborus.* Mun. Cat. ix. p. 2684.

398. Xyleborus truncatus, Shp., *ante*, p. 192.

Ins. Oahu. (?) Imm.
In decaying wood.

399. Xyleborus insularis, Shp., *ante*, p. 193.

Ins. Oahu, Kauai. (?) Imm.
Occurs in decaying wood on the Waianae mountains, Oahu, and also on Kauai.

400. Xyleborus obliquus, Shp., *ante*, p. 192.

Ins. Oahu, Hawaii. (?) Imm.
This species has been taken from decaying wood on the mountains both of Oahu and Hawaii.

401. Xyleborus rugatus, Blackb., *ante*, p. 192.

Ins. Oahu. (?) Imm.
Unique.

402. Xyleborus immaturus, Blackb., *ante*, p. 193.

Ins. Hawaii, Oahu. (?) Imm.
This species has been taken from decaying wood on the mountains both of Oahu and Hawaii.

403. Xyleborus frigidus, Blackb., *ante*, p. 193.

Ins. Maui. (?) Imm.
A single specimen was taken from decaying wood at an elevation of about 4000 feet, on Haleakala.

Genus CXXXVII.—*Hypothenemus.* Mun. Cat. ix. p. 2679.

404. Hypothenemus eruditus, Westd. Trans. Ent. Soc. Lond. i. p. 34, pl. 7.

Ins. Oahu. (?) Int.
In bark of acacia, on the plains near Honolulu.

405. Hypothenemus maculicollis, Shp. Trans. Ent. Soc. Lond. 1879, p. 101.

Ins. Oahu. (?) Int.
Has occurred in bark of trees in several mountain localities near Honolulu.

406. Hypothenemus griseus, Blackb., *ante*, p. 194.

Ins. Oahu, (?) Imm.
A single specimen occurred in the stem of a poppy, on the plains near Honolulu.

Tribe PLATYPINI.

Genus CXXXVIII.—*Crossotarsus.* Mun. Cat. IX. p. 2696.

407. Platypus externedentatus, Fairm. Rev. Zool. 1850, p. 51.

Ins. Oahu. (?) Int. Tahiti.

A short series occurred in the trunk of an acacia in Honolulu.

Fam. ANTHRIBIDÆ.

Genus CXXXIX.—*Mauia.* Blackb., *ante*, p. 194.

408. Mauia satelles, Blackb., *ante*, p. 195.

Ins. Maui. (?) Imm.

A single specimen occurred low down in the Wailuku Valley, Maui. It was beaten from a species of acacia.

Genus CXL.—*Araœocerus.* Mun. Cat. IX. p. 2749.

409. Curculio fasciculatus, De Geer. Ins. v. 276, t. 16, f. 2.

Ins. Hawaii, Maui, Lanai, Oahu, Kaui. Imm. Widely distributed.

Common in decaying leaves wherever they are heaped up from any cause, and occasionally beaten from fresh foliage. Very variable. This insect has no saltatory powers whatever.

Fam. CERAMBYCIDÆ.

Tribe PARANDRINI.

Genus CXLI.—*Parandra.* Mun. Cat. IX. p. 2751.

410. Parandra puncticeps, Shp. Trans. Ent. Soc. Lond. 1878, p. 202.

Ins. Oahu. (?) Imm. (?) Philippine Islands.

Under the bark and in the wood of acacia falcata on the mountains. This species or a closely allied one occurs in the Philippine Islands.

Tribe PRIONINI.

Genus CXLII.—*Ægosoma.* Mun. Cat. IX. p. 2776.

411. Ægosoma reflexum, Karsch, Berl. Ent. Zeit. XXV. p. 7, taf. I. f. 11.

Ins. Hawaii. (?) Int.

Taken by me at a place called Oolaa on Hawaii, at an elevation of about 2000 feet above the sea, walking on the rafters of a native hut. February (T. B.) "Grove Ranche," Karsch.

Tribe CERAMBYCINI.

Genus CXLIII.—*Astrimus.* Shp. Trans. Ent. Soc. Lond. 1878, p. 204.

412. Astrimus obscurus, Shp. op. cit.

Ins. Oahu. (?) Int.

Oahu. Taken usually at light, but occasionally under the bark of acacia, in the vicinity of Honolulu.

Genus CXLIV.—*Ceresium.* Mun. Cat. IX. p. 2837.

413. Stenocorus simplex, Gyll, Schön. Syn. Ins. App. I. 3, p. 178.

Ins. Oahu. Int. Widely distributed.

Rather common near Honolulu, at light; frequently found also under bark of acacia.

Genus CXLV.—*Sotenus.* Shp. Trans. Ent. Soc. Lond. 1878, p. 135.

414. Sotenus setiger, Shp. op. cit.

Ins. Oahu. (?) Int.

Not rare in Honolulu, at light, and under bark of acacias.

Genus CXLVI.—*Clytarlus.* Shp. op. cit. p. 137.

415. Clytarlus microgaster, Shp. op. cit. p. 103.

Ins. Oahu. Aut.

Rare; in decaying wood on the mountains near Honolulu, at an elevation of 2000 feet. June.

416. Clytarlus robustus, Shp. op. cit. p. 206.

Ins. Oahu. Aut.

On decaying trunks of acacia falcata. Has occurred in the Palolo and Mauna Loa valleys near Honolulu, and on the Waianae mountains.

417. Clytarlus finschi, Har. Mitt. Munch. Ent. Ver. 1880, p. 166. Karsch, Berl. Ent. Zeit. XXV. p. 8, taf. I. f. 13.

Ins. Mauai. Aut.

This insect is found on decaying trunks of acacia falcata at an elevation of about 4000 feet above the sea. Occurs in May, but not commonly.

418. Clytarlus blackburni, Shp., *ante*, p. 195.

Ins. Hawaii. Aut.

Found on decaying trunks and branches of a species of acacia growing at an elevation of about 6000 to 7000 feet on Mauna Loa. May.

419. Clytarlus pulvillatus, Karsch, Berl. Ent. Zeit. XXV. p. 9, taf. I. f. 14.

Ins. Maui. Aut.

"Grove Ranche." Unknown to us.

420. Clytarlus pennatus, Shp. Trans. Ent. Soc. Lond. 1881, p. 532.

Ins. Maui. Aut.

Rare; four specimens were taken at different times on Haleakala, at elevations between 4000 and 6000 feet, but it is not quite clear to what tree the insect is attached.

421. Clytarlus cristatus, Shp. op. cit. 1878. p. 207.

Ins. Oahu. Aut.
Not rare on acacia falcata at elevations of 2000 to 3000 feet, on the mountains near Honolulu.

422. Clytarlus modestus, Shp. op. cit. 1879, p. 104.

Ins. Maui. Int.
Occurs rather plentifully in April and May on acacia falcata, at an elevation of about 4000 to 5000 feet, on Haleakala. Two specimens were taken in February.

423. Clytarlus filipes, Shp. *ante*, p. 196.

Ins. Hawaii. Aut.
Found rather plentifully in company with C. blackburni, Shp.

424. Clytarlus fragilis, Shp. Trans. Ent. Soc. Lond. 1881, p. 534.

Ins. Oahu. Aut.
Three specimens were beaten from some dead sticks lying on the ground near the head of the Palolo valley, Oahu. November.

Genus CXLVII.—*Clytus*. Mun. Cat. IX. p. 2922.

425. Clytus crinicornis, Chev. Ann. Ent. Fr. 1860, p. 460.

Ins. Oahu. Int.
Very plentiful in and around Honolulu, on the trunks of a species of acacia.

Tribe LAMIINI.

Genus CXLVIII.—*Lagocheirus*. Mun. Cat. X. p. 3148.

426. Cerambyx araneiformis, L. Syst. Nat. ed. XII. p. 625.

Ins. Oahu. (?) Int. Brazil, St, Domingo.
Not uncommon on the mountains of Oahu. Generally beaten from aleurites triloba.

Genus CXLIX.—*Micracantha*. Mun. Cat. X. p. 3085.

427. Micracantha nutans, Shp. Trans. Ent. Soc. Lond. 1878, p. 209.

Ins. Oahu. (?) Int.
Not rare in Honolulu, where all the specimens taken have been found in houses. The species is probably introduced in timber.

Genus CL.—*Oopsis*. Mun. Cat. X. p. 3106.

428. Lamia nutator, Fab. Mant. I. p. 142. (?) Syn. Stasilea curvicornis, Karsch, Berl. Ent. Zeit. XXV. p. 8, pl. I. f. 12.

Ins. Oahu. (?) Int. Tahiti, (?) Australia.
Common on aleurites triloba and other plants, at various elevations, but especially on the mountains.

III.

TOPOGRAPHICAL TABLE OF HAWAIIAN COLEOPTERA, WITH SUMMARY, GENERALIZATIONS, AND COMMENTS. By D. SHARP.

The coleoptera of the Sandwich Islands are mostly small or very minute insects; and the few species whose individuals are of large size are either known to be non-endemic or will nearly certainly be found to be so: and of the endemic species there are few—probably it would be correct to say absolutely none—that would strike an ordinary observer as being beautiful; Clytarlus microgaster is indeed the only endemic species that has any special adornment appreciable by the human eye. But they are of great interest owing to the remote and isolated position of the group of islands they inhabit; and there can be no doubt that a thorough and accurate knowledge of them and their peculiarities would be important evidence as to the validity of the theory of organic evolution. If we understood thoroughly the structures of the inhabitants of the archipelago, and could make a valid estimate of the totality of peculiarity they possess, we should be in a position to discuss the question of how this peculiarity is to be accounted for. We do not, however, yet possess an accurate idea of the total peculiarity of the organisms of these islands, both because the creatures found there are only very imperfectly known, and also because our knowledge of the inhabitants of other places is in many respects only rudimentary, so that accurate comparison is not at present possible. Still, owing to the special interest attaching to this fauna, I have drawn up a table to illustrate the amount of its endemicity, and will briefly summarise the results of my examination.

There are in all 150 genera, comprising 428 species, found in the islands, and of this number 99 of the genera and 352 of the species are at present known only from the archipelago. This bare statement would convey, I believe, a far from correct impression, and I will briefly pass in review the components of the fauna, the object kept in view being to get a right impression of the amount of endemicity.

The family Cicindelidæ, universal on continental lands, is absent from the Sandwich Islands, as it is from all other remote island groups.

The family Carabidæ has, on the contrary, eleven genera and sixty-one species, of which seven genera, comprising thirty-three species, are peculiar to the islands; this statement, however, requires supplementing, for the genus Saronychium, belonging to the Lebiini, will probably be found elsewhere,* while on the other hand the genus Cyclothorax, with twenty-one species in these islands, has only one species outside of them, it being found in Australia and New Zealand.

* No exponent of this genus has reached Europe for comparison; only two individuals, indeed, of the S. inconspicuum, its only species, having been found.

We may treat Cyclothorax, therefore, as at present appearing to be characteristic of the archipelago, for we must remember that if species are occasionally immigrant to the islands from other parts of the world, the reverse is no doubt sometimes the case, and the productions of these or other remote islands may occasionally find their way to other regions of the earth and become established there. As regards the Bembidiini, we can at present form no accurate conception of whether they are endemic or not. They are very obscure small insects, and it is probable that some of them—possible that all of them—may have reached the islands from outside, some of the Tachys under bark of logs, some of the Bembidia with the earth attached to the roots of floating trees, or even with the ballast of ships. Leaving them out of the question, it appears that the islands have seven genera of peculiar Anchomenini, comprising no less than fifty-one species, while the non-endemic, or doubtfully endemic Carabidæ are none of them Anchomenini, and amount to ten species distributed in four genera, and two sub-families. This brings out a striking endemicity in the Hawaiian Anchomenini, which is much increased by a more detailed study of their peculiarities; and, in illustration of this, I may mention that Mr. H. W. Bates—undoubtedly at present the first of our authorities on this important family of beetles—when I had the pleasure of submitting to him a series of about half the species of Hawaiian Anchomenini, pronounced them, after a brief inspection, to be very peculiar and highly endemic. Indeed, so peculiar are some of these Anchomenini that they have been referred by authorities to other sub-families, Mr. Blackburn and Herr Karsch having considered one of the genera—Atrachycnemis—as a member of the Harpalini, and Karsch having treated another genus—Disenochus—as a member of the Broscini, while Mr. Blackburn thought it rather to belong to Pterostichini. Although I have been able to examine each of these genera in a very imperfect manner, I believe, however, that both will prove to be aberrant Anchomenini.

The family Dytiscidæ has only two genera and three species, all of the latter but none of the former being peculiar. I think it probable, however, that all the species will be found elsewhere; one of them, indeed, has an allied species, formerly supposed to have been the same species, in Tahiti. The members of this family appear to be capable of greater migration than those of almost any other group of beetles.

The family Hydrophilidæ is poorly represented by four species in three genera; two of the species are peculiar, one of them, moreover, forming a peculiar genus, but it is a very small insect, and will probably be found elsewhere; and this will pretty certainly be also the case with the species of Hydrobius.

The Staphylinidæ are represented by fifty-five species, distributed in eighteen genera. Two of the genera are peculiar, as are forty-three of the species. This family is, however, so difficult to deal with, owing to our want of knowledge of the smaller exotic forms, and to the small amount of study that has been

given to its classification, that no importance can at present be attached to its consideration. The insects most likely ultimately to prove indigenous are the Diestotæ, nine in number, and the extremely peculiar Oligotæ and Liophænæ, eleven in number; the Oligotæ are very remarkable, and will no doubt ultimately form one or more distinct genera; O. clavicornis—which there is good reason to treat as introduced—being the only form that will probably remain as a genuine Oligota. A good many of the other Staphylinidæ are cosmopolitan or widely distributed species; and others—such as Pachycorynus, Lispinodes, and Glyptoma—live under bark, and may probably have been immigrant in dead trees and logs; while as regards the Myllenæ and Trogophlæi the same remark may be made as that above recorded concerning the Bembidiini.

The Trichopterygidæ have three peculiar species, each representing a distinct genus, and one of them peculiar. Mr. Matthews, the authority on this family, considers them highly interesting; but as they are the most minute of all beetles, and our ignorance of the exotic forms is nearly absolute, no importance can at present be attached to this.

The Histeridæ have five genera and twelve species. None of the genera are peculiar, but nine of the species are not known elsewhere. It is significant that all these nine species are excessively minute forms, and most, if not all, occur in dead wood, so that it is probable they will be found elsewhere, and are in part immigrants in floating wood.

The Nitidulidæ have no less than forty-three species, a very large number for a small family, of which only about 1000 species are known from all parts of the world. Putting aside the three Carpophili, of which two are known to be introduced species, and the two Haptonci, one of which is also in this category, we have remaining thirty-eight species assigned to two genera. One of these two has five species, and is peculiar; the other—Brachypeplus—with no less than thirty-three species, is a widely-distributed genus; but it should be remarked that Brachypeplus is not really at present a genus, but rather one of those composite magazines that abound in the present state of entomological knowledge—or rather ignorance, and that the Sandwich Island Brachypepli are themselves a very varied assemblage, and are not known to be at all closely allied to any of the forms found outside the islands. One of them, B. infimus, is very different from the others, and will, I believe, prove not endemic; it lives under the bark of trees. The other Brachypepli have varied habits; many are found in flowers, some on or under bark of trees, and at exuding sap, and in the stems of ferns and other plants. The species of Gonioryctus—the peculiar genus—occur in flowers, and the stems of lilies and tree-ferns.

The families Monotommidæ, Trogositidæ, and Rhyssodidæ are each represented in the fauna we are considering by a single species of foreign origin. And though Colydidæ have two species, one of them forming a peculiar genus, they probably

should be referred to the same category; they are wood-feeders, both confined to Oahu, one of them found only once near Honolulu.

The Cucujidæ are a more varied assemblage, consisting of eight genera and twelve species Two of the genera are peculiar—Brontolæmus with one, Monanus with two species; six of the twelve species are known to occur elsewhere, and the only species that can have any claim at all to be considered autochthonous are the Brontolæmus, which is found running like a longicorn on partially decayed trees, and no doubt lives under the bark, and the Monani which are connected with Pandanus; but I have little doubt that these, like the other Cucujidæ, will prove to be of foreign origin.

The family Cryptophagidæ has two species of minute beetles, each representing a genus; one is certainly, the other probably, foreign. The Lathridiidæ have a single foreign species, Latridius nodifer, Westd., whose distribution over the world is apparently going on under the observation of our generation.

The Mycetophagidæ have four genera and four species. All the genera and two of the species are known outside the islands; the two peculiar species both live in bark or wood, and will probably prove to be foreign insects introduced naturally.

The Corylophidæ have three genera and five species. Though all the species are peculiar at present, none of the genera are so; and as they are excessively minute and nothing is known of the exotic forms, it is probable all may prove to be foreign.

The Erotylidæ are represented by two of the smallest and most obscure of the known members of the family. One of them forms at present a peculiar genus, but both may well prove to be introduced.

The Coccinellidæ have five species, two of them introduced, while the other three belong to Scymnus, an uninteresting genus, consisting of a large number of very small insects, very little collected or known. There is no direct evidence as to whether they may ultimately prove peculiar or not.

The Dermestidæ have eight species in four genera, one genus being doubtfully peculiar; the Attagenus and two Cryptorhopala may be looked on as certainly introduced, but the three species of Labrocerus are more probably immigrant by natural means. They are found by beating dead branches of trees.

The Lucanidæ are represented by a single species, only once found; it is a peculiar genus, said to be allied to Chilian forms, and is probably an immigrant with natural driftwood.

The great family Scarabæidæ has only three genera and five species, none of them peculiar.

The Eucnemidæ are represented by five species of the genus Fornax. This genus has a large number of obscure exotic species, all of them very little known, and this latter point also applies to the Hawaiian species. They are exclusively xylophagous, and will probably be found elsewhere.

The family Buprestidæ is represented by a single North American species, found at Honolulu.

The Elateridæ have seven genera and fourteen species. Five of these genera are known outside the islands, and have each only a single species, four of the species being also known as foreign. The two genera at present peculiar have nine species between them, and at present I can form no opinion whether they will prove autochthonous or not; possibly they may do so.

The Malacodermidæ have two genera and two species, one genus and both the species being peculiar. Both these insects are found only in Honolulu, and (as the peculiar genus is an extremely obscure and minute creature) are probably of foreign origin.

The Cleridæ consist only of three widely distributed species.

The Ptinidæ, on the other hand, comprise six genera and twenty-three species. Three of the genera, having between them four species, are of foreign origin, and three of their four species are known elsewhere. The other three genera have nineteen species between them, and there is no evidence to show that they are of foreign origin other than that they are pre-eminently wood feeders; the genus Mirosternus belongs to a different group to what the other two genera do; and it is my opinion that while these latter may probably prove autochthonous, Mirosternus may more probably be found elsewhere, it being a highly specialised—while Holcobuis and Xyletobius are generalised—forms.

The Bostrichidæ have five genera and five species. The members of this xylophagous family are widely distributed, even in remote parts of the earth, and all the Hawaiian species are foreign.

The Cioidæ are a small family of obscure beetles, living in boleti. From all parts of the world scarcely 200 species are known; it is, therefore, remarkable that there should be twenty already discovered in the islands whose fauna we are considering. Although these twenty species are referred all to one genus—Cis—they form really a most varied assemblage, exhibiting, I believe, a greater variety of forms than could be found in all the other members of the genus—and their number is more than one hundred—at present known from all parts of the earth. Some of the Hawaiian species, indeed, scarcely possess the facies of the family, so that they were not at first recognised either by Mr. Blackburn or myself as belonging to it; and as the family is, though much neglected, really an interesting one on account of its unspecialised (or, as some would say, "ancient") character, these Hawaiian Cioidæ are really of great interest and importance.

The enormous family Tenebrionidæ has seven genera and eight species. The genera are all known from elsewhere, as are also six of the species, and the other two species, belonging to obscure and neglected genera, will pretty certainly also prove to be foreign.

The Cistelidæ have two genera and two species. This family is suffering from

complete neglect, so that although both of the Hawaiian species and one of the two genera are as yet peculiar, there is no reason for believing they will not be found elsewhere.

The Anthicidæ and Œdemeridæ are also families whose exotic members are very incompletely known, so that it is probable that their three members in the Hawaiian archipelago may be found elsewhere; one of them, indeed, is known to occur in the Marquesas, and another is found only near Honolulu, where it especially frequents the flowers of exotic eucalypti.

The family Aglycyderidæ may be looked on as peculiar to the Sandwich Islands. It is true that two members are known from other parts—one from the Canary Islands, the other from New Zealand—but these two are so different in certain important respects from the Hawaiian forms that the late Dr. Leconte considered them entitled to family distinction. Whether that be the case or not it is at least certain that the Aglycyderidæ form one of the most interesting of all the families of Coleoptera, and it appears to have claims to be considered absolutely the most primitive of all the known forms of Coleoptera, it being a synthetic form linking the isolated Rhyncophorous series of families with the Clavicorn series. About thirty species are known in the Hawaiian Islands, and they exhibit much difference *inter se*, but cannot at present be treated as forming more than one genus; many of the species are most difficult of study, owing to the great sexual disparities, and the apparently very close alliance between the various species in the most obscure part of the genus. Hence it is probable that accurate observation may show that the number of true species may prove considerably greater or considerably less than that I have mentioned.

The Curculionidæ are the most extensive of all the great families of Coleoptera, and there are at present known fifteen genera and forty-nine species in the Hawaiian Islands. This number, requires, however, analysis before we can comprehend its significance. The sub-family Otiorhynchini has one genus and two species peculiar; the Cyladini have one widely-distributed species; the Cryptorhynchini are represented by Acalles, with five peculiar species, and two allied genera (whose members are so rare that I have not been able to get a sight of them from Mr. Blackburn), each with a single species; then we have the Calandrini, with two genera and four species, three of which are already known from elsewhere, while the other is a small insect with habits rendering it probable that it also is of foreign origin; then comes the sub-family Cossonini, having eight genera and thirty-four species—that is, more than two-thirds of the whole of the Curculionidæ of the islands. That the Cyladini and Calandrini are all foreign is certain; and I believe this will prove to be the case also with the Otiorhynchini* and the

* Since this was written a species of the Otiorhynchus genus, Rhyncogonus, has been detected in the Marquesas Islands by Mr. J. J. Walker.

Cryptorhynchini, though as regards these latter members it should be remarked that Acalles is one of the most frequent components of insular faunæ, being very richly represented in New Zealand, Polynesia, and the Atlantic islands. The Cossonini stand in a very different position; five of the eight genera, and all the species are peculiar, while the largest genus—Oodemas—has fifteen species, and is peculiar to the island; indeed, there is no near ally known to it. The endemic Heteramphus, too, displays a singularly large variety amongst its few species, so that though it is quite probable that a good many of the Hawaiian Cossonini may prove to be foreign forms, yet there remains a considerable proportion that we are justified in considering as probably thoroughly autochthonous.

The family Scolytidæ is represented by three widely-distributed genera, having between them ten species, of which eight are peculiar; they are xylophagous in habits, and very obscure forms; the exotic species have been very little collected, and it is very probable that all the Hawaiian Scolytidæ may prove to be foreign.

The Anthribidæ have one widely-distributed species, and in addition a genus supposed to be peculiar, but of which only one individual has been found, and is probably immigrant.

The Cerambycidæ have in all nineteen species, and of this number nine represent each a genus, while the remaining ten all belong to one peculiar genus. Of the nine scattered genera, each of which has but one species, seven are known elsewhere, one is doubtfully distinct from a foreign form, and the other is an obscure form, which may highly probably prove to be also foreign. Indeed I look upon it as pretty certain that all the Hawaiian Longicorns, except the genus Clytarlus, are of foreign origin. This latter genus has eight species, and they display so much difference that they might well form four genera. The only near ally of Clytarlus is the Haitian genus Euryscelis, of two species. It is worthy of note that only one of the foreign Longicorns has been found in any island except that of Oahu; in which island two of them, however—Cerambyx araneiformis and Lamia nutator—have become thoroughly naturalised. Clytarlus has been found on all the islands visited except Kauai, where probably one or more species remain to be found.

From the above brief revision of the Coleoptera of the archipelago it will be gathered that I am of opinion that a large portion of the fauna has been introduced from without. I think, indeed, that we may distinguish three elements in the fauna—First, species that have been introduced, in all probability comparatively recently, by artificial means, such as with provisions, stores, building timber, ballast, or growing plants; many of these species are nearly cosmopolitan. Second, species that have arrived in the islands, and have become more or less completely naturalized; they are most of them known to be wood- or bark-feeders, but some that are not so may have come with the earth adhering to the roots of floating trees; a few, such as the Dytiscidæ, or water beetles, may possibly have been introduced by violent winds. Third, after making every allowance for introduction

by these artificial and natural methods, there still remains a large portion standing out in striking contrast with the others, which we are justified in considering strictly endemic or autochthonous.

In the table of distribution I have endeavoured to distinguish these three components by adding "int." for introduced, to the names of those I believe to belong to the first category, and "imm." for immigrant to those I suppose to belong to the second, and "aut." for autochthonous, to the truly endemic species. Our knowledge is not yet sufficiently advanced to enable us to decide, in the case of many of these species, certainly to what category they should be referred, and I have intimated this doubt by a note of interrogation.

On looking over the table we find there are fifty-six species that we may feel certain are merely artificial introductions, and ten that are almost certainly natural immigrants, and also forty others that we may be sure belong to one or other of these two categories, though we cannot at present safely decide to which. It would, for instance, not be possible for us to decide, on the very small evidence we at present possess, whether certain of the foreign Longicorns have been introduced with trees for planting, or with building timber, in which cases they would be cited as introduced, or whether they may have arrived in more or less remote periods with trees or logs brought by natural currents. Still these forty species, being foreign, may with certainty be subtracted from the endemic or autochthonous fauna. There are also eighty-four species which, though they are not yet known outside the islands, I believe from various reasons and different kinds of evidence to be also immigrant species and not endemic; and there are, in addition, twenty-four others which I suspect to be immigrant, but which may really prove to be autochthonous. If we subtract all these, we find left a total of 214 species—curiously enough exactly one half of the total known fauna—that we must, in the present condition of the science of entomology, consider to be autochthonous.

Although the introduced and immigrant species play an important part in the extant fauna, yet the former are to the naturalist of little interest, and I shall not farther discuss them. The immigrant species are, however, of much greater importance to the biologist, and if it were certainly determined which of the species were natural introductions, or immigrants, as I prefer to term them, and what countries they have come from, it would throw a most important light on many of the obscure features of the geographical distribution of animals. At present entomological knowledge is not sufficiently advanced to enable us to do this. Most of these immigrants are small insects, that have not yet been collected or preserved, from tropical countries, or even in our own colonies; we must, therefore, wait for a further advance in Coleopterology before we can generalize with advantage on this subject. The only group where we can at present do this with any chance of approximation to exactness is in the case of the Longicorns, and here unfortunately the number of the species is but small; I may note, however,

that there are three species of Longicorns that I look on as probably immigrant, and six that I consider as introductions, and that the three immigrants have come, one from the Philippine Islands, one from tropical America, and one from some other of the Polynesian Islands. So far as we may generalise from these three cases it would appear that these immigrants have been derived from the nearest lands in various directions, and these conclusions will, I fancy, be farther supported by the immigrants belonging to less studied groups.

But the chief interest of the Sandwich Island fauna is attached to its endemic or autochthonous components, and these, on being separated from the foreign elements, will be found to contrast strongly with the latter in many respects. Thus, though there are members of thirty-eight families found in the islands, yet the autochthonous half of the fauna occurs only in nine of the families, while the foreign half of the fauna has its components scattered through the whole of the thirty-eight families, except only the Aglycyderidæ (which is nearly peculiarly Hawaiian). The autochthonous Coleopterous fauna is made up as follows:—The family Carabidæ has fifty-one species, distributed in seven genera, all peculiar to the islands; the family Staphylinidæ has nineteen species, distributed in three genera, only one of which is peculiar, though were not these insects so minute they would probably, if we were to judge from their strange appearance, form other distinct genera; the Nitidulidæ have thirty-eight species belonging to two genera, one of which is peculiar, while the other is composed by a large assemblage of very varied forms; the Elateridæ have seven species forming a peculiar genus; the Anobiini (Ptinidæ) have nineteen species in three peculiar genera; the Cioidæ nineteen species in one genus, not peculiar, but forming an assemblage of varied forms; Aglycyderidæ has the one genus with thirty species peculiar; the Curculionidæ are represented by three peculiar genera of Cossonini, with twenty-one species; and the Cerambycidæ by one peculiar genus of ten species.

Continuing our contrast of the autochthonous and foreign components of the fauna, we find that while the 214 foreign Coleoptera belong to 132 genera, giving an average of 1·62 in each genus; the 214 autochthonous species belong to only eighteen genera, giving an average of 11·9 in each genus.

Moreover, these truly native Hawaiian Coleoptera form a true micro-fauna—that is to say, they present us in miniature in each group with those numerous cross-affinities and complex repetitions of peculiarities that render the establishment of genera and larger groups of a really natural nature so very difficult.

My knowledge—and I think I may say our knowledge—of generalized Coleopterous structures is not sufficiently advanced to enable me to say with anything like authority whether these supposed autochthonous beetles are more or are less specialized in their structure than the average of beetles of other lands. I am inclined to the opinion, however, that there are in this respect two different elements among them—viz. one in which specialization is lower than the average,

and one in which it is, on the contrary, greater. Thus the Aglycyderidæ are related both to the Clavicorn and to the Rhyncophorous series of Coleoptera, and may thus be looked on as synthetic between two of what many would call the most ancient of the groups of Coleoptera. So too the Anchomenini may be classed as perhaps on the whole the least specialized of the normal Carabidæ; while the Cioidæ are a peculiarly unspecialized family, to such an extent indeed that, though they are usually classed near the Malacoderms in the Serricorn series, they would probably be better placed in the Clavicorn series. The Anobiid genera Xyletobius and Holcobius are of a type of low specialization.

On the other hand the Anobiid genus Mirosternus and the Cerambycide Clytarlus are certainly highly evoluted forms. This latter fact makes me look on their claims to be truly autochthonous with some suspicion; but, as I have no other ground for excluding them from the list of autochthones, I have allowed them to remain there.

I think it may be looked on as certain that these islands are the home of a large number of peculiar species not at present existing elsewhere, and if so it follows that either they must have existed formerly elsewhere and migrated to the islands, and since have become extinct in their original homes, or that they must have been produced within the islands. This last seems the simpler and more probable supposition, and it appears highly probable that there has been a large amount of endemic evolution within the limits of these isolated islands. How far back in the life history of the species that evolution may have extended we cannot say; we are not at all in a position to decide whether the now peculiar species were formerly introduced into the islands, being at the time of their introduction of the same structure as individuals found elsewhere, and having become since different because they have been subject to different conditions from the other descendants of their common ancestors, or whether the evolution may not have been absolutely *ab initio*; the organisms having originated in these islands by processes and under laws such as must have originated organisms somewhere or other.

The data for the discussion of such problems as these are at present quite insufficient; but I cannot leave this subject without stating my opinion as to the extremely important nature of the knowledge we may ultimately derive from a careful, long-continued, conscientious study of the organisms of remote islands. Meanwhile it is only too probable that the evidence they may give us will be lost for ever to the human race if we do not obtain it speedily. It is known that a large number of these organic beings have become extinct in recent times, and it is also known that the process of extinction is going on in various spots with various degrees of rapidity. The organic beings found in lands widely separated from other lands offer most important evidence as to the nature of organic evolution in the past, and consequently in the future; and it is certainly the duty of this generation to preserve for its posterity all the evidence that can be obtained on

this important question. I am myself profoundly convinced that such knowledge will ultimately be found to be of extreme value, and its possession a great blessing to the human race. I agree with Mr. Wallace in thinking that it can be only obtained by resident naturalists (*vide* Island Life, p. 7, note); and I would respectfully urge on those who have the guidance and control of the small amount of funds devoted to the acquisition and preservation of organised knowledge, attention to the fact that such knowledge as that I am alluding to can be gained with greater completeness by us than it can be by any future generation.

Some of the largest and most important of the families of Coleoptera are quite unrepresented in the autochthonous fauna of the islands; there are no Cicindelidæ, no Buprestidæ, no Lamellicorns; and the enormous series of Phytophaga, with probably 50 or 100,000 species on the earth, is quite unrepresented at present in these islands either by autochthonous or foreign forms.

Although the number of species found in the islands is already considerable, yet it is still far from being anything like complete; some of the islands, indeed, have been comparatively little explored. Although it is clear that valuable results may be obtained by a comparison of the separate faunæ of each of the islands, yet at present it would not be justifiable to found any speculations on the facts we already know, because much more complete knowledge is attainable, and we may hope will ultimately be attained. As, however, there appears very little prospect of any fresh information being obtained for some time to come, I shall briefly summarise the facts under this heading as they at present appear.

In the island of Hawaii eighty-six species have been found; in Maui 107; in Lanai thirty-five; in Oahu 276; in Kauai fifty-one. Oahu thus stands far ahead of the others in the number of species it has produced, and there is much reason for believing that it is really the most productive of the islands; it has been well searched, and it is probable that the total number of species of Coleoptera at present to be found in it does not much exceed 300. On the other hand, the remaining islands are far less completely explored; and I estimate that when they have been better examined the total number of species of Coleoptera at present to be found in the islands may rise from 428 to somewhere between 550 and 600.*

If we confine our attention to the endemic or autochthonous species (or rather to those considered such by me), we then find that the numbers found in the different islands stand as follows:—Hawaii, 55; Maui, 52; Lanai, 14; Oahu, 95; Kauai, 18.

Thus we see that of the Coleopterous fauna of Hawaii, ·64 is autochthonous, ·36 foreign; in Maui, ·486 is autochthonous, ·514 foreign; while in Lanai the proportions stand as ·4 and ·6; in Oahu, ·344 and ·656; and in Kauai, ·35, ·65.

* Mr. Blackburn, *ante* p. 208, places the number very much higher—between 800 and 900—and I think his estimate likely to prove nearer the truth than mine.

Thus whereas two-thirds of the species in Hawaii are autochthonous, in Kauai, so far as we know at present, only one-third are autochthonous, two-thirds being foreigners. This conclusion, however, is not of importance, and will be subject, no doubt, to great alteration; but still it is possible that Oahu, when stripped of its foreign forms, will not have so great a predominance over the other islands in number of species as it possesses under a mere indiscriminating census enumeration.

Limiting our investigation to the autochthonous forms, it is interesting to ask how large a proportion of the species are confined to one island, and how many are more widely distributed in the archipelago, and on doing this we meet with a very striking result, viz. that out of the 214 autochthonous species, 200 are confined to a single island, only fourteen out of the whole number being found in more than one island. Of these fourteen species five are common to Hawaii and Maui; two to Hawaii and Oahu; one to Hawaii and Lanai; two to Oahu and Kauai; one to Hawaii, Oahu, and Kauai; one to Hawaii, Maui, and Oahu; one to Lanai, Oahu, and Kauai; and one to Hawaii, Maui, Oahu, and Kaui. That there is a striking endemicity as regards each separate island is therefore clear, although it is probable that future more exact and fuller knowledge will modify the above statement considerably. What are true species and what mere morphological forms is a study that has scarcely been commenced in Coleopterology, and one that in the Sandwich Islands will evidently be attended with peculiar difficulties. But there is perhaps no part of the world whose fauna could throw so much light on this difficult question—a question that I believe is destined to become of great importance in the future of Zoology—as that of this remote and isolated insular group.

There is some evidence of generic endemicity in the case of the separate islands. For example, we find that the genus Metromenus has in all nineteen species, and of these seventeen are found in Oahu and two in Maui, the other islands not having yet yielded any species of the genus. Maui has both the two species of the anomalous Disenochus, which is found nowhere else, and this same island the highly peculiar Atrachyenemis, which has as yet but one species. In the genus Cyclothorax we have twenty-one species in the archipelago, six peculiar to Hawaii, eleven peculiar to Maui, three to Oahu, while one is common to Hawaii and Maui. Thus Oahu possesses ninety per cent. of the whole Metromeni, but only about thirteen per cent. of the genus Cyclothorax. So too in the Anobiini we find that Oahu possesses five out of seven of the species of Mirosternus, while it has only one out of the eleven species of Holcobius and Xyletobius. Heteramphus, with four species, has been found only in Oahu. This part of the investigation is, however, in the present state of Zoology of little practical importance, owing to the indefinite, even mystical, nature of the zoological expression "genus."

[*In this Table the Genera and Species that are at present not known to occur outside the Sandwich Islands are each preceded by an asterisk.*]

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
Fam. CARABIDÆ.						
Tribe Lebiini.						
Plochionus.						
1. Carabus pallens, Fab., ...	Imm., .	...	×	...	...	...
*Saronychium.						
*2. Saronychium inconspicuum, Blackb. . .	(?) Imm., .	...	...	...	×	...
Tribe Anchomenini.						
*Metromenus.						
*3. Dyscolus palmæ, Black., ...	Aut., . .	...	...	...	×	...
*4. Dyscolus mutabilis, Black., ...	Aut., . .	...	...	...	×	...
*5. Dyscolus caliginosus, Black., . . .	Aut., . .	...	...	...	×	...
*6. Anchomenus muscicola, Blackb., . .	Aut., . .	...	...	...	×	...
*7. Anchomenus corruscus, Er., . . .	Aut. (? extinct)	...	...	...	×	...
*8. Anchomenus epicurus, Blackb., . . .	Aut., . .	...	...	...	×	...
*9. Anchomenus insociabilis, Blackb., . .	Aut., . .	...	...	...	×	...
*10. Anchomenus erro, Blackb., ...	Aut., . .	...	×	...	...	...
*11. Anchomenus protervus, Blackb., . . .	Aut., . .	...	...	...	×	...
*12. Anchomenus meticulosus, Blackb., . .	Aut., . .	...	...	...	×	..
*13. Anchomenus fossipennis, Blackb., . .	Aut., . .	...	...	...	×	...
*14. Anchomenus oceanicus, Blackb., . . .	Aut., . .	...	...	...	×	...
*15. Anchomenus bardus, Blackb., . . .	Aut., . .	...	...	...	×	...
*16. Anchomenus fugitivus, Blackb., . . .	Aut., . .	...	...	...	×	...
*17. Anchomenus cuneipennis, Blackb., . .	Aut., . .	...	...	...	×	...
*18. Anchomenus scrupulosus, Blackb., . .	Aut., . .	...	...	...	×	...
*19. Anchomenus fraternus, Blackb., . . .	Aut., . .	...	...	...	×	...
*20. Anchomenus putealis, Blackb., . . .	Aut., . .	...	×	...	...	...
*21. Anchomenus mysticus, Blackb., . . .	Aut., . .	...	...	...	×	...
*Colpodiscus.						
*22. Anchomenus lucipetens, Blackb., . .	Aut., . .	×	...	...	...	...
*23. Dyscolus tantalus, Blackb., ...	Aut., . .	...	...	...	×	...
*Baryphistus.						
*24. Anchomenus incendiarius, Blackb., . .	Aut., . .	×	...	...	...	...
*25. Anchomenus rupicola, Blackb., . . .	Aut., . .	...	×	...	...	...
*26. Anchomenus sharpi, Blackb., . . .	Aut., . .	...	×	...	...	...
*Blackburnia.						
*27. Blackburnia insignis, Shp., ...	Aut., . .	...	...	...	×	...
*28. Blackburnia blaptoides, Blackb., . . .	Aut., . .	...	...	...	×	...
*29. Blackburnia frigida, Blackb., . . .	Aut., . .	...	×	...	...	...
*Disenochus.						
*30. Disenochus anomalus, Blackb., . . .	Aut., . .	...	×	...	...	...
*31. Disenochus terebratus, Blackb., . . .	Aut., . .	...	×	...	...	...
*Atrachycnemis.						
*32. Atrachycnemis sharpi, Blackb., . . .	Aut., . .	...	×	...	...	...
	Carried forward, . .	2	9	...	21	...

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
	Brought forward, . .	2	9	...	21	...
CYCLOTHORAX.						
[This genus has outside the Hawaiian Islands at present only a single species, inhabiting Australia and New Zealand.]						
*33. Cyclothorax montivagus, Blackb., . .	Aut., . .	×	×	...	...	...
*34. Cyclothorax pele, Blackb., ...	Aut., . .	×	...	...	...	...
*35. Cyclothorax micans, Blackb., . . .	Aut., . .	...	×	...	...	...
*36. Cyclothorax multipunctatus, Blackb., . .	Aut., . .	...	×	...	...	...
*37. Cyclothorax brevis, Blackb., . . .	Aut., . .	...	...	...	×	...
*38. Cyclothorax robustus, Blackb., . . .	Aut., . .	...	×	...	...	...
*39. Cyclothorax oahuensis, Blackb., . . .	Aut., . .	...	...	...	×	...
*40. Cyclothorax simiolus, Blackb., . . .	Aut., . .	...	...	...	×	...
*41. Cyclothorax obscuricolor, Blackb., . .	Aut., . .	...	×	...	...	...
*42. Cyclothorax bembidioides, Blackb., . .	Aut., . .	×	...	...	...	...
*43. Cyclothorax paradoxus, Blackb., . . .	Aut., . .	×	...	...	...	...
*44. Cyclothorax scaritoides, Blackb., . . .	Aut., . .	...	×	...	...	...
*45. Cyclothorax cordaticollis, Blackb.. . .	Aut., . .	...	×	...	...	...
*46. Cyclothorax deverilli, Blackb., . . .	Aut., . .	×	...	...	...	...
*47. Cyclothorax vulcanus, Blackb., . . .	Aut., . .	×	...	...	...	.
*48. Cyclothorax unctus, Blackb., . . .	Aut., . .	...	×	...	...	...
*49. Cyclothorax lætus, Blackb., ...	Aut., . .	...	×	...	...	...
*50. Cyclothorax angusticollis, Blackb., . .	Aut., . .	...	×	...	...	...
*51. Cyclothorax rupicola, Blackb., . . .	Aut., . .	..	×	...	..	...
*52. Cyclothorax inæqualis, Blackb., . . .	Aut., . .	...	×	...	...	...
*53. Cyclothorax Karschi, Blackb., . . .	Aut., . .	×	...	...	...	...
Tribe BEMBIDIINI.						
TACHYS.						
*54. Tachys oahuensis, Blackb., ...	(?) Int., .	...	...	...	×	...
*55. Tachys arcanicola, Blackb., ...	(?) Imm., .	...	...	...	×	...
*56. Tachys atomus, Blackb., ...	(?) Imm. or aut.	...	...	...	×	...
*57. Tachys mucescens, Blackb., ...	(?) Int., .	...	...	...	×	...
BEMBIDIUM.						
*58. Bembidium teres, Blackb., ...	(?) Imm., .	...	×	...	...	...
*59. Bembidium pacificum, Blackb., . . .	(?) Imm., .	...	...	...	×	...
*60. Bembidium ignicola, Blackb., . . .	(?) Imm., .	×	...	...	...	..
*61. Bembidium spurcum, Blackb., . . .	(?) Imm., .	...	×	...	...	...
Fam. DYTISCIDÆ.						
Tribe COLYMBETINI.						
RHANTUS.						
*62. Colymbetes pacificus, Boisd., . . .	(?) Imm., .	×	×	×	×	×
COPELATUS.						
*63. Colymbetes parvulus, Boisd., . . .	(?) Imm., .	...	×	...	×	...
*64. Copelatus mauiensis, Blackb., . . .	(?) Imm., .	...	×	...	...	...
Fam. HYDROPHILIDÆ.						
HYDROBIUS.						
*65. Hydrobius semicylindricus, Esch., . .	(?) Imm., .	×	×	×	×	×
	Carried forward, . .	12	27	2	32	2

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
	Brought forward, . .	12	27	2	32	2
CYCLONOTUM.						
*66. Cyclonotum subquadratum, Fairm., . .	(?) Int., .	...	...	...	×	...
*67. Sphæridium abdominale, Fab., . . .	(?) Int., .	...	×	...	×	...
*OMICRUS.						
*68. Omicrus brevipes, Shp., ...	(?) Imm., .	...	...	...	×	...
Fam. STAPHYLINIDÆ.						
Tribe ALEOCHARINI.						
STENAGRIA.						
*69. Falagria currax, Shp., ...	(?) Int., . .	...	...	...	×	...
BOLITOCHARA.						
*70. Bolitochara impacta, Blackb., . . .	(?) Int., . .	...	...	...	×	...
TACHYUSA.						
*71. Tachyusa pumila, Shp..	(?) Imm., .	...	×	...	...	...
HOMALOTA.						
72. Homalota coriaria, Kr., ...	Int., . .	×	×	×	×	×
DIESTOTA.						
*73. Diestota plana, Shp., ...	Aut., . .	..	...	...	×	...
*74. Diestota parva, Shp., ...	Aut., . .	...	...	...	×	...
*75. Diestota latifrons, Shp., ...	Aut., . .	...	...	...	...	×
*76. Diestota rufescens, Shp., ...	Aut., . .	...	...	...	...	×
*77. Diestota palpalis, Shp., ...	Aut., . .	×	...	...	...	...
*78. Diestota puncticeps, Shp., ...	Aut., . .	...	...	...	×	...
*79. Diestota carinata, Shp., ...	Aut., . .	...	...	...	×	...
*80. Diestota montana, Blackb., ...	Aut., . .	×	...	...	...	...
*81. Diestota incognita, Blackb., ...	Aut., . .	×	...	...	...	...
PHLŒOPORA.						
*82. Phlœopora cingulata, Shp., ...	(?) Imm., .	...	...	...	×	...
*83. Phlœopora diluta, Shp., ...	(?) Imm., .	...	...	...	...	×
OLIGOTA.						
*84. Oligota glabra, Shp., ...	Aut., . .	×	...	...	...	...
*85. Oligota polita, Shp., ...	Aut., . .	...	...	...	×	...
*86. Oligota mutanda, Shp., ...	Aut., . .	×	..	...	...	...
*87. Oligota prolixa, Shp., ...	Aut., . .	×	×	...	...	...
*88. Oligota kauiensis, Blackb., ...	Aut., . .	...	..	...	...	×
*89. Oligota longipennis, Blackb., . . .	Aut., . .	...	...	...	×	...
*90. Oligota simulans, Blackb., ...	Aut., . .	...	...	...	...	×
*91. Oligota variegata, Blackb., ...	Aut., . .	...	...	..	×	...
*92. Oligota clavicornis, Shp., ...	(?) Imm., .	...	...	...	...	×
*LIOPHÆNA.						
*93. Liophæna gracilipes, Shp., ...	Aut., . .	×	...	...	...	...
*94. Liophæna flaviceps, Shp., ...	Aut., . .	×	...	...	...	...
MYLLÆNA.						
*95. Myllæna familiaris, Shp., ...	(?) Imm., .	...	...	...	×	...
*96. Myllæna curtipes, Shp., ...	(?) Imm., .	.	...	...	×	...
	Carried forward, . .	21	31	3	48	9

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
	Brought forward,	21	31	3	48	9
MYLLÆNA—*continued.*						
*97. Myllæna vicina, Shp.,	(?) Imm.,	...	...	...	×	...
*98. Myllæna discedens, Shp.,	(?) Imm.,	...	...	...	×	...
*99. Myllæna pacifica, Blackb.,	(?) Imm.,	×	...	...	...	...
*100. Myllæna oahuensis, Blackb.,	(?) Imm.,	...	...	...	×	...
Tribe XANTHOLINI.						
PACHYCORYNUS.						
*101. Pachycorynus discedens, Shp.,	(?) Int. or imm.	...	...	...	×	...
LEPTACINUS.						
102. Leptacinus flavipennis, Kr.,	(?) Int.,	...	...	...	×	...
Tribe STAPHYLININI.						
CREOPHILUS.						
103. Staphylinus maxillosus, L.,	(?) Int.,	×	×	×	×	×
CAFIUS.						
104. Philonthus nauticus, Fairm.,	(?) Imm. or int.	...	×	...	...	...
PHILONTHUS.						
105. Philonthus scybalarius, Nord.,	Int.,	×	×	×	×	×
106. Staphylinus discoideus, Grav.,	Int.,	?	?	?	×	?
107. Philonthus turbidus, Er.,	Int.,	...	...	...	×	...
108. Staphylinus nigritulus, Gr.,	Int.,	×	×	×	...	...
Tribe PÆDERINI.						
LITHOCHARIS.						
109. Lithocharis debilicornis, Woll.,	Int.,	...	...	...	×	...
110. Lithocharis celebensis, Fauv.,	Int.,	...	...	...	×	...
*111. Lithocharis incompta, Shp.,	(?) Imm.,	×	...	...	...	...
112. Lithocharis fuscipennis, Fauv.,	(?) Int.,	...	...	...	×	...
Tribe OXYTELINI.						
OXYTELUS.						
*113. Oxytelus bledioides, Blackb.,	(?) Int.,	...	...	...	×	...
*114. Oxytelus advena. Shp.,	(?) Int.,	...	...	...	×	...
*115. Oxytelus pygmæus, Kr.,	Int.,	...	...	...	×	...
TROGOPHLŒUS.						
*116. Trogophlœus senilis, Shp.,	(?) Imm.	...	...	...	×	...
*117. Trogophlœus abdominalis, Shp.,	(?) Imm.	...	...	...	×	...
*118. Trogophlœus fontinalis, Shp.,	(?) Imm.	...	...	...	×	...
Tribe PIESTINI.						
*LISPINODES.						
*119. Lispinodes explicandus, Shp.,	(?) Imm.,	...	...	...	×	...
*120. Lispinodes quadratus, Blackb.,	(?) Int. or imm.	...	...	...	×	...
*121. Lispinodes pallescens, Blackb.,	(?) Int. or imm.	...	...	...	×	...
GLYPTOMA.						
*122. Glyptoma blackburni, Shp.,	(?) Imm.,	×	...	...	×	×
*123. Glyptoma brevipenne, Shp.,	(?) Imm.,	...	...	...	×	...
	Carried forward,	27	35	6	71	12

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
Brought forward,	. .	27	35	6	71	12
Fam. TRICHOPTERYGIDÆ.						
Actidium.						
*124. Actidium sharpianum, Matth., . . .	(?) Imm., .	...	...	...	×	...
Ptiliodes.						
*125. Ptiliodes blackburni, Matth., . . .	(?) Imm., .	...	...	...	×	...
Ptinella.						
*126. Ptinella pacifica, Matth., ...	(?) Imm., .	...	...	...	×	...
Fam. HISTERIDÆ.						
Carcinops.						
127. Dendrophilus 14-striatus, Steph., . .	Int., . .	...	...	...	×	...
Saprinus.						
128. Saprinus lugens, Er., ...	Int., . .	×	×	×	×	×
129. Saprinus oregonensis, ...	Int., . .	?	?	?	×	×
Bacanius.						
*130. Bacanius atomarius, Shp., ...	(?) Int., . .	...	...	...	×	...
*131. Bacanius confusus, Blackb., . . .	(?) Int., . .	...	...	...	×	...
Acritus.						
*132. Acritus insularis, Shp., ...	(?) Int., . .	...	...	...	×	...
Æletes.						
133. Acritus basalis, Lec., ...	(?) Imm., .	...	...	...	×	...
*134. Æletes facilis, Shp., ...	(?) Imm., .	...	...	...	×	...
*135. Æletes longipes, Shp., ...	(?) Imm., .	...	×	×	×	...
*136. Æletes concentricus, Shp..	(?) Imm., .	...	×	...	...	...
*137. Æletes monticola, Blackb., ...	(?) Imm., .	...	×	...	...	...
*138. Æletes flavitarsis, Lew., ...	(?) Imm., .	...	...	...	×	...
Fam. NITIDULIDÆ.						
Carpophilus.						
139. Nitidula dimidiata, Fab., ...	Int., . .	?	×	?	×	?
140. Carpophilus maculatus, Murr., . . .	Int., . .	×	×	×	?	×
141. Dermestes hemipterus, Lin., . . .	Int., . .	...	×	...	×	...
*Gonioryctus.						
*142. Gonioryctus latus, ...	Aut., . .	...	...	...	×	...
*143. Gonioryctus blackburni, Shp., . . .	Aut., . .	...	...	...	×	...
*144. Gonioryctus monticola, Shp., . . .	Aut., . .	...	...	...	×	...
*145. Gonioryctus fugitivus, Blackb., . . .	Aut., . .	×	...	...	...	...
*146. Gonioryctus similis, Blackb., . . .	Aut., . .	...	...	...	×	...
Brachypeplus.						
*147. Brachypeplus tinctus, Shp., . . .	Aut., . .	...	...	...	×	...
*148. Brachypeplus protinoides, Shp., . . .	Aut., . .	...	×	...	...	...
*149. Brachypeplus torvus, Blackb., . . .	Aut., . .	...	...	...	×	...
*150. Brachypeplus koelensis, Blackb., . . .	Aut., . .	...	...	×	...	...
*151. Brachypeplus bidens, Shp., . . .	Aut., . .	×	...	...	...	...
Carried forward,	. .	31	43	10	92	15

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
	Brought forward, . .	31	43	10	92	15
BRACHYPEPLUS—*continued.*						
*152. Brachypeplus floricola, Blackb., . . .	Aut., . .	...	...	...	...	×
*153. Brachypeplus olindae, Blackb., . . .	Aut., . .	...	×	...	...	...
*154. Brachypeplus celatus, Shp., . . .	Aut., . .	×	...	...	...	...
*155. Brachypeplus affinis, Shp., ...	Aut., . .	×	...	...	...	...
*156. Brachypeplus inauratus, Shp., . . .	Aut., . .	×	...	...	...	...
*157. Brachypeplus apertus, Shp., . . .	Aut., . .	×	...	...	...	...
*158. Brachypeplus quadraticollis, Blackb., . .	Aut., . .	×	...	...	...	...
*159. Brachypeplus discedens, Shp., . . .	Aut., . .	...	...	...	×	...
Var. (?) B. kauaiensis, Blackb., . . .		...	...	...	...	×
*160. Brachypeplus metallescens, Shp., . . .	Aut., . .	×	...	...	...	...
*161. Brachypeplus parallelus, Blackb., . . .	Aut., . .	...	...	×	...	...
*162. Brachypeplus vestitus, Shp., . . .	Aut., . .	...	...	...	×	...
*163. Brachypeplus varius, Shp., . . .	Aut., . .	×	...	...	...	...
*164. Brachypeplus blackburni, Shp., . . .	Aut., . .	×	...	...	...	...
Var. lanaiensis, Blackb., ...		...	...	×	...	...
*165. Brachypeplus robustus, Shp., . . .	Aut., . .	...	...	...	×	...
*166. Brachypeplus guttatus, Shp., . . .	Aut., . .	...	...	...	×	...
*167. Brachypeplus sordidus, Shp., . . .	Aut., . .	×	...	...	...	...
*168. Brachypeplus expers, Blackb., . . .	Aut., . .	...	×	...	...	...
*169. Brachypeplus reitteri, Shp., . . .	Aut., . .	.	...	...	×	...
*170. Brachypeplus infimus, Shp., . . .	(?) Imm., .	...	...	...	×	...
*171. Brachypeplus obsoletus, Shp., . . .	Aut., . .	×	...	...	...	...
*172. Brachypeplus omalioides, Shp., . . .	Aut., . .	×	...	...	×	...
*173. Brachypeplus aper, Shp., ...	Aut., . .	...	...	...	×	...
*174. Brachypeplus explanatus, Shp., . . .	Aut., . .	...	...	...	×	...
*175. Brachypeplus brevis, Shp., ...	Aut., . .	...	...	...	×	...
*176. Brachypeplus spretus, Blackb., . . .	Aut., . .	...	×	...	...	...
*177. Brachypeplus inæqualis, Shp., . . .	Aut., . .	...	...	...	×	...
*178. Brachypeplus striatus, Shp., . . .	Aut., . .	×	...	...	...	...
*179. Brachypeplus bicolor, Blackb., . . .	Aut., . .	×	...	...	...	...
*180. Brachypeplus impressus, Shp., . . .	Aut., . .	...	...	...	×	...
HAPTONCUS.						
181. Haptoncus tetragonus, Murr., . . .	Int., . .	×	?	?	×	×
*182. Haptoncus mundus, Shp., ...	(?) Imm., .	×	...	...	×	...
,, ,, var., ...		...	...	...	...	×
Fam. MONOTOMIDÆ.						
HESPEROBÆNUS.						
183. Rhizophagus capito, Fairm., . . .	Imm., . .	?	?	?	×	×
Fam. TROGOSITIDÆ.						
TROGOSITA.						
184. Tenebrio mauritanicus, L., ...	Int., . .	?	?	?	×	?
Fam. COLYDIDÆ.						
ANTILISSUS.						
*185. Antilissus aper, Shp., ...	(?) Int. or imm.	...	...	...	×	...
EULACHUS.						
*186. Eulachus hispidus, Blackb., . . .	(?) Int. or imm.	...	...	...	×	...
	Carried forward, . .	46	46	12	110	20

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
Brought forward, . .	46	46	12	110	20
Fam. RHYSSODIDÆ.						
Clinidium.						
187. Rhyzodes liratus, Newm., ... Int., . .	...	...	...	×	...
Fam. CUCUJIDÆ.						
Cryptamorpha.						
188. Psammæchus desjardinsii, Guer., . . Imm., . .	×	...	...	×	×
Telephanus.						
*189. Telephanus insularis, Shp., . . . (?) Imm., .	...	...	...	×	×
*190. Telephanus pallidipennis, Blackb., . . (?) Imm., .	...	...	...	×	...
Læmophlœus.						
191. Cucujus pusillus, Schön., ... Int., . .	...	...	...	×	...
*192. Læmophlœus æneus, Shp., ... (?) Imm., .	×	×	...	...	...
*Brontolæmus.						
*193. Brontolæmus elegans, Shp., ... (?) Imm., .	?	?	×	×	×
*Monanus.						
*194. Monanus crenatus, Shp., ... (?) Imm., .	...	...	...	×	...
*195. Monanus brevicornis, Blackb., . . . (?) Imm., .	...	...	...	×	...
Cathartus.						
196. Cryptophagus advena, Walt., . . . Int., . .	...	...	...	×	...
Silvanus.						
197. Dermestes surinamensis, L., . . . Int., . .	?	?	×	×	?
198. Dermestes unidentatus, Fab., . . . Int., . .	...	...	...	×	...
Nausibius.						
199. Corticaria dentata, ... Int., . .	?	?	?	×	?
Fam. CRYPTOPHAGIDÆ.						
Telmatophilus.						
*200. Telmatophilus debilis, Shp., . . . (?) Imm., .	...	...	...	×	...
Henoticus.						
201. Cryptophagus serratus, Gyll., . . . Int., . .	...	×	...	×	...
Fam. LATHRIDIIDÆ.						
Lathridius.						
202. Lathridius nodifer, West., ... Int., . .	×	...	...	×	...
Fam. MYCETOPHAGIDÆ.						
Litargus.						
*203. Litargus vestitus, Shp., ... (?) Imm., .	×	?	×	×	?
Carried forward, . .	50	48	15	126	23

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
	Brought forward, . .	50	48	15	126	23
TYPHÆA.						
204. Dermestes fumatus, Lin., ...	Int., . .	...	...	...	×	...
MYCETEA.						
205. Silpha hirta, Marsh, ...	Int., . .	...	...	...	×	...
PROPALTICUS.						
*206. Propalticus oculatus, ...	(?) Imm., .	?	×	?	×	?
Fam. CORYLOPHIDÆ.						
ORTHOPERUS.						
*207. Orthoperus æqualis, Shp., ...	(?) Imm., .	×	...	...	...	...
SERICODERUS.						
*208. Sericoderus basalis, Shp., ...	(?) Imm., .	...	...	...	×	...
*209. Sericoderus pubipennis, Shp., . . .	(?) Imm., .	...	×	...	×	...
CORYLOPHUS.						
*210. Corylophus rotundus, Shp., ...	(?) Imm. or int.	...	...	...	×	...
*211. Corylophus suturalis, Shp., ...	(?) Imm., .	...	...	...	×	...
Fam. EROTYLIDÆ.						
EUXESTUS.						
*212. Euxestus minor, Shp., ...	(?) Imm., .	...	...	...	×	...
*EIDOREUS.						
*213. Eidoreus minutus, Shp., ...	(?) Imm., .	...	...	...	×	...
Fam. COCCINELLIDÆ.						
NEDA.						
214. Coccinella abdominalis, Say, . . .	Int., . .	?	×	?	×	×
(?) COCCINELLA.						
215. Sp. (?), ...	Int., . .	...	...	...	×	...
SCYMNUS.						
*216. Scymnus vividus, Shp., ...	(?) Imm., .	×	×	?	×	?
*217. Scymnus ocellatus, Shp., ...	(?) Imm., .	...	×	...	×	...
*218. Scymnus discedens, Shp., ...	(?) Imm., .	...	...	...	×	...
Fam. DERMESTIDÆ.						
DERMESTES.						
219. Dermestes cadaverinus, Fab., . . .	Int., . .	?	×	?	×	?
220. Dermestes vulpinus, Fab., ...	Int., . .	×	?	?	×	×
ATTAGENUS.						
*221. Attagenus plebeius, Shp., ...	(?) Int., . .	...	..	...	×	...
*LABROCERUS.						
*222. Labrocerus jaynei, Shp., ...	(?) Imm., .	...	×	...	...	...
*223. Labrocerus concolor, Shp., ...	(?) Imm., .	×	...	...	...	...
*224. Labrocerus obscurus, Blackb., . . .	(?) Imm., .	×	...	...	...	...
	Carried forward, . .	55	55	15	143	25

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
Brought forward,	. .	55	55	15	143	25
CRYPTORHOPALUM.						
*225. Cryptorhopalum brevicorne, Shp.,	(?) Int., . .	...	...	...	×	...
*226. Cryptorhopalum terminale, Shp.,	(?) Int., . .	...	...	...	×	×
Fam. LUCANIDÆ.						
*APTEROCYCLUS.						
*227. Apterocyclus honoluluensis, Wat.,	(?) Imm., .	...	...	...	...	×
Fam. SCARABÆIDÆ.						
Tribe COPRINI.						
APHODIUS.						
228. Scarabeus lividus, Ol.,	Int., . .	×	×	×	×	×
ATÆNIUS.						
229. Aphodius pacificus, Shp.,	(?) Imm. or int.	...	...	...	×	...
230. Atænius stercorator, Horn.,	Int., . .	...	...	...	×	...
231. Atænius peregrinator, Horn.,	Int., . .	...	...	...	×	...
SAPROSITES.						
232. Saprosites pygmæus, Har.,	(?) Int. or imm.	?	×	?	×	?
Fam. EUCNEMIDÆ.						
FORNAX.						
*233. Fornax bonvouloiri, Shp.,	(?) Imm., .	?	×	?	×	?
*234. Fornax sculpturatus, Blackb.,	(?) Imm., .	...	...	...	×	...
*235. Fornax obtusus, Blackb.,	(?) Imm., .	...	×	...	...	...
*236. Fornax longicornis, Blackb.,	(?) Imm., .	...	×	...	...	...
*237. Fornax parallelus, Blackb.,	(?) Imm., .	...	...	...	×	...
Fam. BUPRESTIDÆ.						
BUPRESTIS.						
238. Buprestis adjecta, Lec.,	Int., . .	...	...	...	×	...
Fam. ELATERIDÆ.						
Tribe AGRYPNINI.						
ADELOCERA.						
239. Agrypnus modestus, Boisd.,	Imm., . .	...	...		×	...
Tribe CHALCOLEPIDIIDES.						
CHALCOLEPIDIUS.						
240. Chalcolepidius erythroloma, Cand.,	(?) Imm. or int.	...	.	...	×	...
Tribe ELATERIDES.						
ISCHIODONTUS.						
*241. Ischiodontus hawaiensis, Cand.,	?) Imm., .	?	?	?	?	?
SIMODACTYLUS.						
242. Œolus cinnamomeus, Boisd.,	Imm., . .	...	...	...	×	...
Carried forward,	. .	56	60	16	157	28

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
Brought forward, . .		56	60	16	157	28
MELANOXANTHUS.						
243. Elater melanocephalus, Thunb., . . .	Imm., . .	...	...	...	×	...
*EOPENTHES.						
*244. Eopenthes basalis, Shp., ...	Aut., . .	...	...	...	×	...
*245. Elater humeralis, Karsch., ...	Aut., . .	...	×	...	...	...
*246. Eopenthes obscurus, Shp,, ...	Aut., . .	...	...	...	×	...
*247. Eopenthes konæ, Blackb., ...	Aut., . .	×	...	...	...	...
*248. Eopenthes satelles, Blackb., . . .	Aut., . .	...	...	×	...	...
*249. Eopenthes debilis, Shp., ...	Aut., . .	...	...	...	×	...
*250. Eopenthes ambiguus, Blackb., . . .	Aut., . .	...	...	...	×	...
*ITODACNUS.						
*251. Itodacnus gracilis, Shp., ...	(?) Imm. or aut.	...	...	...	×	...
*252. Corymbites corruscus, Karsch, . . .	(?) Imm. or aut.	...	×	...	...	...
Fam. MALACODERMIDÆ.						
HELCOGASTER.						
*253. Helcogaster pectinatus, ...	(?) Int. . .	...	...	...	×	...
*CACCODES.						
*254. Caccodes debilis, Shp., ...	(?) Int., . .	...	...	...	×	...
Fam. CLERIDÆ.						
TARSOSTENUS.						
255. Clerus univittatus, Rossi., ...	Int., . .	...	...	...	×	...
NECROBIA.						
256. Dermestes rufipes, Fab., ...	Int., . .	×	×	×	×	×
257. Dermestes ruficollis, Fab., ...	Int., . .	×	×	×	×	×
Fam. PTINIDÆ.						
Tribe ANOBIINI.						
*HOLCOBIUS.						
*258. Holcobius major, Shp., ...	Aut., . .	...	×	...	...	...
*259. Holcobius glabricollis, Shp., . . .	Aut., . .	...	...	..	×	...
*260. Holcobius granulatus, Shp., . . .	Aut., . .	×	×	...	...	...
*XYLETOBIUS.						
*261. Xyletobius insignis, Blackb., . . .	Aut., . .	×	...	...	...	...
*262. Xyletobius oculatus, Shp., ...	Aut., . .	×	...	...	...	...
*263. Xyletobius nigrinus, Shp., ...	Aut., . .	...	×	...	...	...
*264. Xyletobius marmoratus, Shp., . . .	Aut., . .	...	×	...	...	...
*265. Xyletobius affinis, Shp., ...	Aut., . .	×	...	...	...	...
*266. Xyletobius serricornis, Shp., . . .	Aut., . .	...	...	×	...	...
*267. Xyletobius lineatus, Blackb., . . .	Aut., . .	×	...	...	...	. .
*268. Tripopitys capucinus, Karsch., . .	Aut., . .	...	×	...	...	...
ANOBIUM.						
269. Dermestes paniceus, L., . . .	Int., . .	...	...	...	×	...
Carried forward, . .		64	69	20	170	30

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
	Brought forward, . .	64	69	20	170	30
LASIODERMA.						
270. Ptinus serricornis, Fab., ...	Int., . .	...	...	...	×	×
CATORAMA.						
271. Catorama mexicana, Chev., ...	Int., . .	...	×	...	...	...
*272. Catorama pusilla, Shp., ...	(?) Int., . .	...	×	...	...	...
*MIROSTERNUS.						
*273. Mirosternus punctatus, Shp., . . .	Aut., . .	...	...	...	×	...
*274. Mirosternus obscurus, Shp., . . .	Aut., . .	...	...	...	×	...
*275. Mirosternus muticus, Shp., ...	Aut., . .	×	×	...	...	...
*276. Mirosternus carinatus, Shp., . . .	Aut., . .	...	...	...	...	...
*277. Mirosternus glabripennis, Shp., . . .	Aut., . .	...	...	...	×	...
*278. Mirosternus debilis, Shp., ...	Aut., . .	...	...	...	×	...
*279. Mirosternus bicolor, Shp., ...	Aut., . .	...	...	...	×	...
*280. Mirosternus acutus, Blackb., . . .	Aut.. . .	...	...	...	...	×
Fam. BOSTRICHIDÆ.						
BOSTRICHUS.						
281. Bostrichus migrator, Shp., ...	Int., . .	...	...	...	×	...
APATE.						
282. Apate lifuana, Mont., ...	(?) Int. or imm.	...	...	...	×	...
XYLOPERTHA.						
283. Apate castanoptera, Fairm., . . .	(?) Int. or imm.	...	...	...	×	...
RHYZOPERTHA.						
284. Rhyzopertha pusilla, Steph., . . .	Int., . .	...	...	...	×	...
LYCTUS.						
285. Xylotrogus brunneus, Steph., . . .	Int., . .	...	...	...	×	...
Fam. CIOIDÆ.						
CIS.						
*286. Cis alienus, Shp., ...	(?) Imm. .	...	...	..	×	...
*287. Cis pacificus, Shp., ...	Aut., . .	...	...	...	×	...
*288. Cis porcatus, Shp., ...	Aut., . .	×	?	?	×	×
*289. Cis bimaculatus, Shp., ...	Aut., . .	×	×	...	...	...
*290. Cis nigro-fasciatus, Blackb., ...	Aut., . .	...	...	×	...	...
*291. Cis signatus, Shp., ...	Aut., . .	×	×	?	×	?
*292. Cis attenuatus, Shp., ...	Aut., . .	...	...	...	...	×
*293. Cis bicolor, Shp., ...	Aut., . .	×	×	...	×	×
*294. Cis setarius, Shp., ...	Aut., . .	×	...	...	...	...
*295. Cis concolor, Shp., ...	Aut., . .	×	...	...	...	...
*296. Cis chloroticus, Shp., ...	Aut., . .	...	×	...	...	...
*297. Cis calidus, Shp., ...	Aut., . .	...	...	...	×	...
*298. Cis insularis, Shp., ...	Aut., . .	...	...	...	×	...
*299. Cis roridus, Shp., ...	Aut., . .	×	...	...	...	...
*300. Cis diminutivus, Shp., ...	Aut., . .	...	...	...	×	...
*301. Cis læticulus, Shp., ...	Aut., . .	...	...	...	×	...
*302. Cis longipennis, Blackb., ...	Aut., . .	...	...	...	...	×
	Carried forward, . .	72	76	21	190	36

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
	Brought forward, . .	72	76	21	190	36
CIS—*continued.*						
*303. Cis evanescens, Shp., ...	Aut., . .	...	...	...	×	×
*304. Cis ephistemoides, Shp., ...	Aut., . .	...	...	×	×	×
*305. Cis vagepunctatus, Blackb., ...	Aut., . .	...	...	...	×	...
Fam. TENEBRIONIDÆ.						
Tribe EPITRAGINI.						
EPITRAGUS.						
*306. Epitragus diremptus, Karsch., . . .	(?) Imm., .	?	×	?	×	×
Tribe OPATRINI.						
OPATRUM.						
307. Opatrum seriatum, Boisd., ...	Imm., . .	×	×	×	×	×
Tribe DIAPERINI.						
PLATYDEMA.						
*308. Platydema obscurum, Shp., . . .	(?) Imm., .	...	...	...	×	...
Tribe ULOMINI.						
GNATHOCERUS.						
309. Trogosita cornuta, Fab., ...	Int., . . .	...	...	...	×	...
TRIBOLIUM.						
310. Tenebrio ferrugineus, Fab., ...	Int., . .	...	...	...	×	...
ALPHITOBIUS.						
311. Tenebrio diaperinus, Panz.. . . .	Int., . .	?	×	?	×	?
312. Helops piceus, Ol., ...	Int., . .	?	?	×	×	×
SCIOPHAGUS.						
313. Heterophaga pandanicola, Esch., . .	Int., . .	?	?	?	×	×
Fam. CISTELIDÆ.						
*LABETIS.						
*314. Labetis tibialis, Wat., ...	(?) Imm., .	...	...	...	×	...
CISTELA.						
*315. Cistela crassicornis, Shp., ...	(?) Imm., .	...	...	...	×	...
Fam. ANTHICIDÆ.						
ANTHICUS.						
316. Anthicus oceanicus, Laf., ...	Imm., . .	?	×	?	×	×
*317. Anthicus mundulus, Shp., ...	(?) Imm., .	?	?	?	×	×
Fam. ŒDEMERIDÆ.						
ANANCA.						
*318. Ananca collaris, Shp., ...	(?) Int., . .	...	...	...	×	...
	Carried forward, . .	73	80	24	206	44

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
Brought forward, . .		73	80	24	206	44
Fam. AGLYCYDERIDÆ.						
*Proterhinus.						
*319. Proterhinus paradoxus, Shp., . . .	Aut., . .	...	...	...	×	...
*320. Proterhinus longulus, Shp., . . .	Aut., . .	...	...	...	×	...
*321. Proterhinus linearis, Blackb., . . .	Aut., . .	...	...	...	...	×
*322. Proterhinus blackburni, Shp., . . .	Aut., . .	...	...	...	×	...
*323. Proterhinus hystrix, Shp., ...	Aut., . .	×	...	...	...	...
*324. Proterhinus pusillus, Shp., ...	Aut., . .	...	...	...	×	..
*325. Proterhinus simplex, Shp., ...	Aut., . .	...	...	...	×	...
*326. Proterhinus scutatus, Blackb., . . .	Aut., . .	...	...	...	...	×
*327. Proterhinus similis, Blackb., . . .	Aut., . .	×	...	...	...	...
*328. Proterhinus tarsalis, Blackb., . . .	Aut., . .	×	...	...	...	...
*329. Proterhinus gracilis, Shp., ...	Aut., . .	×	...	...	...	...
*330. Proterhinus debilis, Shp., ...	Aut., . .	×	...	...	×	...
*331. Proterhinus oscillans, Shp., ...	Aut., . .	...	...	...	×	...
*332. Proterhinus punctipennis, Shp., . . .	Aut., . .	...	×	...	...	...
*333. Proterhinus laticollis, Blackb., . . .	Aut., . .	...	...	...	×	...
*334. Proterhinus robustus, Blackb., . . .	Aut., . .	...	...	...	×	...
*335. Proterhinus integer, Shp., ...	Aut., . .	...	...	×	...	...
*336. Proterhinus humeralis, Shp., . . .	Aut., . .	...	×	...	...	...
*337. Proterhinus ineptus, Shp., ...	Aut., . .	...	...	×	...	...
*338. Proterhinus angularis, Shp., . . .	Aut., . .	...	...	...	×	...
*339. Proterhinus nigricans, Shp., . . .	Aut., . .	...	...	...	...	×
*340. Proterhinus vestitus, Shp., ...	Aut., . .	...	...	...	×	...
*341. Proterhinus detritus, Shp., . . .	Aut., . .	...	...	×	...	...
*342. Proterhinus longicornis, Shp., . . .	Aut., . .	...	...	×	...	...
*343. Proterhinus sternalis, Shp., . . .	Aut., . .	...	×	...	...	...
*344. Proterhinus basalis, Shp., ...	Aut., . .	...	...	...	...	×
*345. Proterhinus dispar, Shp., ...	Aut., . .	...	...	...	×	...
*346. Proterhinus validus, Shp., ...	Aut., . .	...	×	...	...	...
*347. Proterhinus insignis, Shp., ...	Aut., . .	...	...	×	...	...
*348. Proterhinus lecontei, Shp., ...	Aut., . .	...	×	...	...	...
Fam. CURCULIONIDÆ.						
Tribe Otiorhynchini.						
*Rhyncogonus.						
*349. Rhyncogonus blackburni, Shp., . . .	(?) Imm., .	...	..	...	×	...
*350. Rhyncogonus vestitus, Shp., . . .	(?) Imm., .	...	×	...	...	...
Tribe Cyladini.						
Cylas.						
351. Cylas turcipennis, Boh., ...	(?) Imm., .	?	×	?	×	?
Tribe Cryptorhynchini.						
Acalles.						
*352. Acalles lateralis, Shp., ...	(?) Imm. or aut.	...	...	...	×	...
*353. Acalles duplex, Shp., ...	(?) Imm. or aut.	...	...	...	×	...
*354. Acalles angusticollis, Shp., ...	(?) Imm. or aut.	...	×	×	×	×
*355. Acalles decoratus, Blackb., ...	(?) Imm. or aut.	...	...	×	...	...
*356. Acalles mauiensis (et varietates), . . .	(?) Imm, or aut.	...	×	×	...	...
*357. Acalles ignotus, Blackb., ...	(?) Imm. or aut.	...	...	..	×	...
Carried forward, . .		78	89	32	224	49

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
	Brought forward, . .	78	89	32	224	49
*CHÆNOSTERNUM.						
*358. Chænosternum konanum, Blackb., . .	(?) Imm. or aut.	...	...	...	×	...
*HYPEROMORPHA.						
*359. Hyperomorpha squamosa, Blackb., . .	(?) Imm. or aut.	...	..	...	×	...
Tribe CALANDRINI.						
SPHENOPHORUS.						
360. Calandra obscura, Boisd., ...	Int., . .	...	...	...	×	...
CALANDRA.						
*361. Calandra remota, Shp., ...	(?) Imm., .	...	...	...	×	...
362. Calandra linearis (var. striata), . . .	Int., . .	...	...	...	×	...
363. Curculio oryzæ, Lin., ...	Int., . .	...	...	...	×	...
Tribe COSSONINI.						
HETERAMPHUS.						
*364. Heteramphus wollastoni, Shp., . . .	Aut., . .	...	...	...	×	...
*365. Heteramphus foveatus, Shp., . . .	Aut., . .	...	...	...	×	...
*366. Heteramphus hirtellus, Shp., . . .	Aut., . .	...	...	...	×	...
*367. Heteramphus cylindricus, Shp., . . .	Aut., . .	...	...	...	×	...
PENTARTHRUM.						
*368. Pentarthrum prolixum, Shp., . . .	(?) Aut., .	×	?	?	×	?
*369. Pentarthrum obscurum, Shp., . . .	(?) Aut., .	...	...	...	×	...
*370. Pentarthrum blackburni, Shp., . . .	(?) Aut., .	...	...	...	×	...
*ODEMAS.						
*371. Oodemas olindæ, Blackb., ...	Aut., . .	...	×	...	...	...
*372. Oodemas robustum, Blackb., . . .	Aut., . .	...	...	...	×	...
*373. Oodemas nivicola, Blackb., ...	Aut., . .	...	×	...	...	...
*374. Oodemas infernum, Blackb., . . .	Aut., . .	×	...	...	...	...
*375. Oodemas insulare, Blackb., ...	Aut., . .	...	...	...	×	...
*376. Oodemas ænescens, Boh., ...	Aut., . .	...	...	...	×	...
*377. Oodemas sculpturatum, Blackb., . . .	Aut., . .	...	×	...	...	...
*378. Oodemas obscurum. Blackb., . . .	Aut., . .	...	×	...	...	...
*379. Oodemas tardum, Blackb., ...	Aut., . .	...	×	...	...	...
*380. Oodemas æquale, Blackb., ...	Aut., . .	...	...	×	...	...
*381. Oodemas crassicorne, Blackb., . . .	Aut., . .	...	...	×	...	...
*382. Oodemas halticoides, Blackb., . . .	Aut., . .	...	...	...	×	...
*383. Oodemas angustum, Blackb., . . .	Aut., . .	...	...	...	×	...
*384. Oodemas borrei, Blackb., ...	Aut., . .	...	×	...	...	...
*385. Oodemas mauiense, Black., ...	Aut., . .	...	×	...	...	...
*ANOTHEORUS.						
*386. Anotheorus montanus, Blackb., . . .	Aut., . .	...	...	...	×	...
*387. Anotheorus ignavus, Blackb., . . .	Aut., . .	...	×	...	...	...
*PSEUDOLUS.						
*388. Rhyncolus longulus, Boh., ...	(?) Aut., .	...	×	...	×	...
PHLŒOPHAGOSOMA.						
*389. Rhyncolus tenuis, Gemm., ...	(?) Aut., .	...	...	...	×	...
	Carried forward, . .	80	98	34	245	49

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
	Brought forward, . .	80	98	34	245	49
*Dolichotelus.						
*390. Dolichotelus apicalis, Blackb., . . .	(?) Aut., .	...	...	...	×	...
Dryophthorus.						
*391. Dryophthorus squalidus, Shp., . . .	(?) Aut., .	?	×	?	×	×
*392. Dryophthorus gravidus, Shp., . . .	(?) Aut., .	...	...	...	×	...
*393. Dryophthorus crassus, Shp., . . .	(?) Aut., .	...	×	...	×	...
*394. Dryophthorus declivis, Shp., . . .	(?) Aut., .	...	...	...	×	...
*395. Dryophthorus modestus, Shp., . . .	(?) Aut., .	×	×	?	×	?
*396. Dryophthorus pusillus, Shp., . . .	(?) Aut., .	...	...	...	×	...
*397. Dryophthorus insignis, Shp., . . .	(?) Aut., .	...	...	...	×	. .
Fam. SCOLYTIDÆ.						
Tribe Scolytini.						
Xyleborus.						
*398. Xyleborus truncatus, Shp., . . .	(?) Imm., .	...	...	...	×	...
*399. Xyleborus insularis, Shp., . . .	(?) Imm., .	...	..	...	×	×
*400. Xyleborus obliquus, Shp., . . .	(?) Imm., .	×	...	...	×	...
*401. Xyleborus rugatus, Blackb., . . .	(?) Imm., .	...	...	...	×	...
*402. Xyleborus immaturus, Blackb., . . .	(?) Imm., .	×	...	...	×	...
*403. Xyleborus frigidus, Blackb., . . .	(?) Imm., .	...	×	...	...	...
Hypothenemus.						
404. Hypothenemus eruditus, Westd., . . .	Int., . .	...	...	...	×	...
*405. Hypothenemus maculicollis, Shp., . .	(?) Int., . .	...	...	...	×	...
*406. Hypothenemus griseus, Blackb., . . .	(?) Int., . .	...	...	...	×	...
Tribe Platypini.						
Crossotarsus.						
407. Platypus externedentatus, Fairm., . .	(?) Int., . .	...	...	...	×	...
Fam. ANTHRIBIDÆ.						
*Mauia.						
*408. Mauia satelles, Blackb., ...	(?) Imm., .	...	×	...	...	...
Araeocerus.						
*409. Curculio fasciculatus, de Geer., . . .	Int., . .	×	×	×	×	×
Fam. CERAMBICIDÆ.						
Tribe Parandrini.						
Parandra.						
*410. Parandra puncticeps, Shp., ...	(?) Imm., .	...	...	...	×	...
Tribe Prionini.						
Ægosoma.						
*411. Ægosoma reflexum, Karsch., . . .	(?) Int., . .	×	...	...	...	...
Tribe Cerambycini.						
*Astrimus.						
*412. Astrimus obscurus, Shp., ...	(?) Int., . .	...	...	...	×	...
	Carried forward, . .	85	104	35	265	52

GENERA AND SPECIES.		Hawaii.	Maui.	Lanai.	Oahu.	Kauai.
	Brought forward, . .	85	104	35	265	52
CERESIUM.						
413. Stenocorus simplex, Gyll., ...	Int., . .	...	...	...	×	...
*SOTENUS.						
*414. Sotenus setiger, Shp., ...	(?) Int., . .	...	...	...	×	...
*CLYTARLUS.						
*415. Clytarlus microgaster, Shp., . . .	Aut., . .	...	...	...	×	...
*416. Clytarlus robustus, Shp., ...	Aut., . .	...	...	...	×	...
*417. Clytarlus finschi, Har., ...	Aut., . .	...	×	...	...	...
*418. Clytarlus blackburni, Shp., . . .	Aut., . .	×	...	...	...	...
*419. Clytarlus pulvillatus, Karsch., . .	Aut., . .	?	...	...	...	...
*420. Clytarlus pennatus, Shp., ...	Aut., . .	...	×	...	...	...
*421. Clytarlus cristatus, Shp., ...	Aut., . .	...	...	...	×	...
*422. Clytarlus modestus, Shp., ...	Aut., . .	...	×	...	...	...
*423. Clytarlus filipes, Shp., ...	Aut., . .	×	...	...	...	...
*424. Clytarlus fragilis, Shp., ...	Aut., . .	...	...	...	×	...
CLYTUS.						
425. Clytus crinicornis, Chev., ...	Int., . .	...	...	...	×	...
Tribe LAMIINI.						
LAGOCHEIRUS.						
426. Cerambyx araneiformis, L., ...	Imm., . .	...	...	...	×	...
MICRACANTHA.						
427. Micracantha nutans, Shp., ...	(?) Int., . .	...	...	...	×	...
OOPSIS.						
428. Lamia nutator, Fab., ...	Imm., . .	...	...	...	×	...
	TOTAL, . .	87	107	35	275	52

NOTE.—During the passage of these Memoirs through the press Mr. Blackburn has established a new genus, Mauna (Ent. Mo. Mag. xxi. p. 25), for Blackburnia frigida, No. 29 of the preceding Catalogue.